

THE *Canadian Hospital*

A Monthly Journal for Hospital Executives



Toronto, Can.

The Edwards Publishing Company

August, 1927



The degree of flexibility
is definitely determined by
this delicate instrument

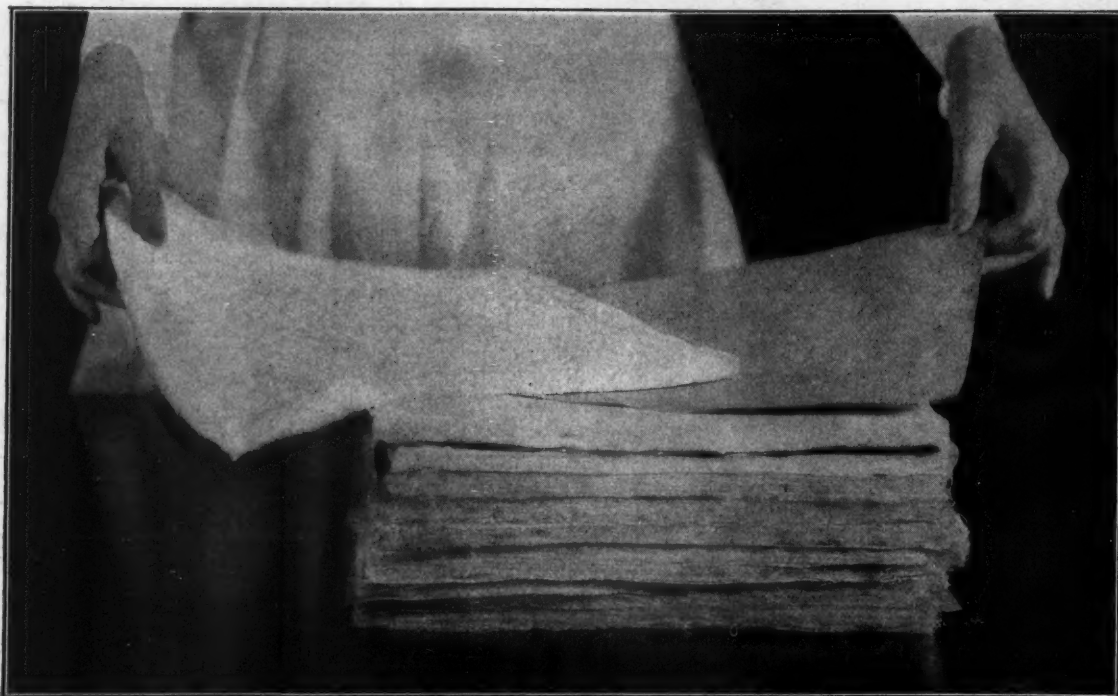


FLEXIBLE

DAVIS & GECK, INC. • 211 TO 221 DUFFIELD STREET • BROOKLYN, N. Y.

In This Issue—

Toronto Hospital for Consumptives
Shriner Hospital's Boy Scout Troup
Keeping Down Refrigeration Plant Costs
News of Hospitals and Staffs



Cellucotton Absorbent Wadding, ready-cut! The newest step in the Lewis plan to give dressings and dressing materials to hospitals in the most convenient forms possible.

The world's finest absorbent is now the most convenient to use

MOST hospital executives readily admit that there is no finer absorbent than Cellucotton Absorbent Wadding. 4 to 8 times more absorbent than cotton, with greater ability to retain drainage, it has earned a well-deserved place as standard material in a majority of American and Canadian hospitals.

And now, a still greater advantage! Cellucotton Absorbent Wadding may now be bought already cut into the sizes most needed by hospitals! No more tedious labor for nurses, cutting up material for dressings! No more lack of cut material in crucial moments!

Cellucotton Absorbent Wadding, ready-cut, is the newest

step in the Lewis plan to give hospitals surgical dressings in the most convenient forms possible.

Cellucotton Absorbent Wadding is cut into 6 common sizes. From these sizes, hospitals can make nearly every dressing they need. This means that you can now enjoy Cellucotton Absorbent Wadding's unsurpassed absorbency—its remarkable economy

—together with the greatest convenience of use ever offered in an absorbent material.

Let us send you free samples of the new ready-cut Cellucotton Absorbent Wadding. A postal with your name will bring them. Ask also for samples of Celluwipes and Kotex, the two other finished products of Cellucotton Absorbent Wadding. Write today.

5 IMPORTANT USES

—♦—
Maternity Pads
Abdominal or Combination Dressings
Empyema Dressings
Dressings for all other drainage cases
Defecation Pads

* * *
{Always look for the blue, easily-identified wrapper, stamped with the trade-marked name "Cellucotton Absorbent Wadding."}

**LEWIS MANUFACTURING
 COMPANY
 OF CANADA, LTD.**

13 Victoria Square, Montreal, Quebec

CELLUCOTTON ABSORBENT WADDING

Please refer to THE CANADIAN HOSPITAL when writing

100% is the standard for bran

THERE are many cases where adding a definite amount of bran to the diet is of great benefit. Not only as a prompt relief from faulty elimination, but as a pleasant, safe preventive.

Every physician prefers to deal with *known* quantities. Kellogg's ALL-BRAN may be prescribed with full confidence that the results anticipated will be accomplished. For ALL-BRAN provides corrective "bulk" in a known, definite amount. It is 100% bran.

Part-bran products are usually doubtful—both as to the quantity of bran they contain and the results they accomplish. Some are 50% bran—others 25%—or more or less. In any case, there is no accurate standard by which to gauge their effectiveness.

Kellogg's is delicious to the taste. A prescription patients like to take. It may be served as a breakfast cereal with milk or cream—and with fruits or honey added. Or it may be used in many kinds of cooking. It is sold by grocers everywhere.

Made by Kellogg in London, Ontario.



Kellogg's

ALL-BRAN

Please refer to THE CANADIAN HOSPITAL when writing

LEADERSHIP



The excellence of
ACME-INTERNATIONAL X-RAY EQUIPMENT
IS EVIDENCED BY THE CHARACTER OF
CANADIAN INSTITUTIONS WHICH
HAVE CHOSEN IT.

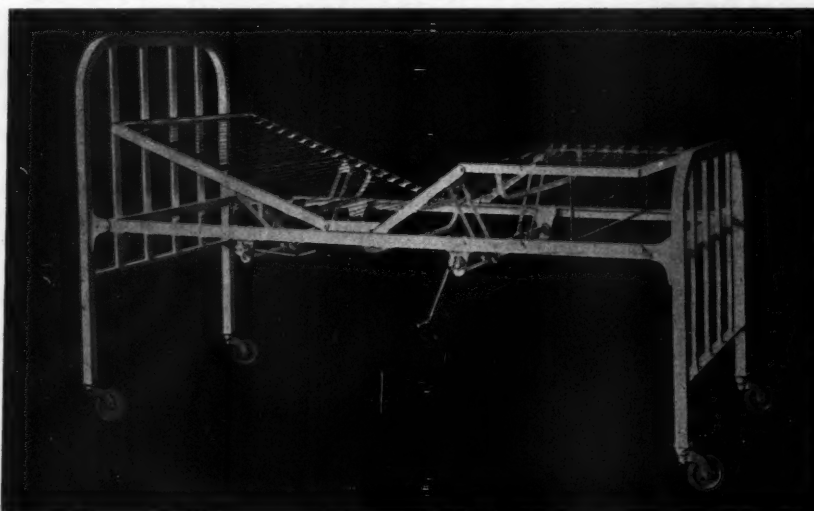
Sold, Installed and Satisfactorily Serviced by

THE M. B. EVANS X-RAY CO.

Toronto Branch: 60 RICHMOND ST. E.

DETROIT

The Walkerite Fowler Bed No. 800



REAL FEATURES

Spring Comfort
Best sagless spring.

Easy Working
A child can raise
and lower it.

**Patented Malleable
Corner Lock**

Very Rigid

**Equipped with 4-in.
rubber-tired cas-
tors, adjustable.**

Write for pamphlet

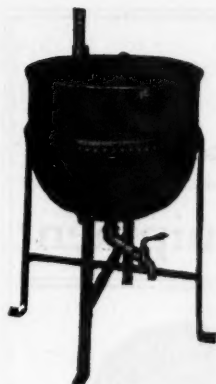
The METAL CRAFT CO., Limited

Manufacturers of Hospital Equipment

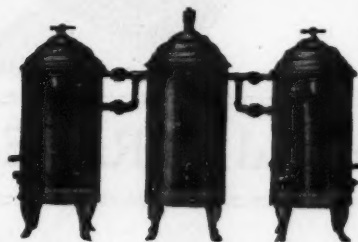
GRIMSBY

ONTARIO

Please refer to THE CANADIAN HOSPITAL when writing



Steam Jacket Kettle



Battery of Tea and Water Urns

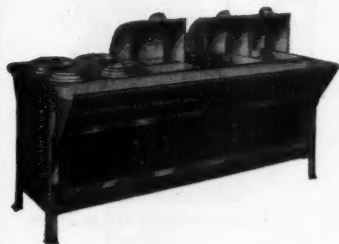


Steam Roaster



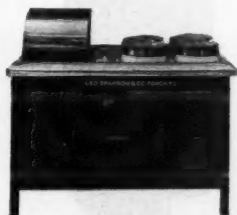
Open Top Gas Range

Steam cooking plays an important part in the up-to-date hospital.



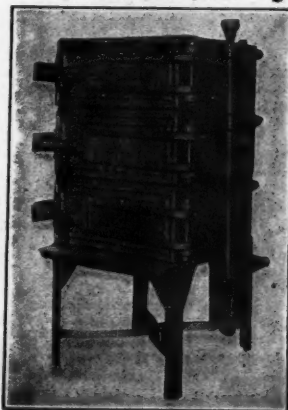
Steamtable on Plate Warmer

The combined steamtable and plate warmer is ideal for serving meals.



Hospital Ward Steamtable
(Above) Steamtable for use in individual wards.

(Below) Steam cooker, a necessity in the larger hospitals.



Sectional Steam Cooker

An Important Message to the Man Who Pays the Bills

A FEW months ago we were requested to appear before the board of directors of a certain hospital. No matter how hard they had tried, the cost of preparing meals always remained too high. This is what we found—a hospital most efficient in every department except the kitchen. A badly arranged kitchen fitted with obsolete equipment, making extra help necessary.

This is what we did: Re-designed the entire kitchen, and in so doing reduced the help required by 25 per cent; installed STANDARD Kitchen Equipment, bringing the kitchen up-to-date in every respect.

This is what happened: By the end of the first year this new installation will have paid for itself. Next year it will pay a dividend.

The coupon will bring you a message of importance. Mail it to-day.

“STANDARD” KITCHEN EQUIPMENT

Geo Sparrow & Co.
119 Church Street
Toronto, Ont.

CH-8

Gentlemen:

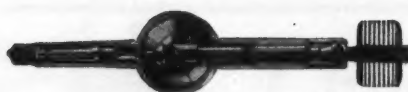
We are interested in reducing our food preparation costs. Send us the information checked below. ☐ Send illustrated catalogue No. 6.

☐ Have your representative call when next in district.

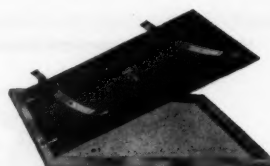
Hospital.....

Town or City..... Prov.....

Please refer to THE CANADIAN HOSPITAL when writing



10 M. A. Radiator-Type Coolidge Tube



The Victor Cassette

How to Modernize an Old X-Ray Equipment



Victor Model Potter-Bucky Diaphragm

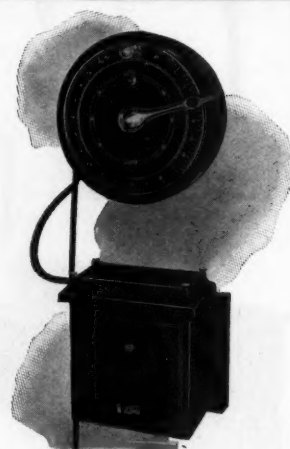


Victor-Kearsley Stabilizer

ONE of the greatest handicaps under which many X-ray laboratories are operating today is the attempt to produce good radiographic results with a too limited amount of accessory equipment.

This is especially true where the equipment has been in use for several years, as often-times the blame for inferior radiographic work is laid to "age of equipment," when as a matter of fact a new machine would show only a small improvement in the quality of work if the accessories so necessary to modern technic were not used. There are no doubt many existing X-ray equipments which offer years of usefulness, if by the addition of proper accessory equipment they are modernized.

Illustrated herewith are a few accessory items, one or more of which may prove to be all that is necessary to bring some present inadequate equipments up to the standard of present-day requirements for the highest quality of radiographic results.



Victor Stabilized X-Ray Timer



Victor Auto-Transformer Unit

Send for the May-June issue of "Service-Suggestions," which contains an interesting and instructive article on this subject.

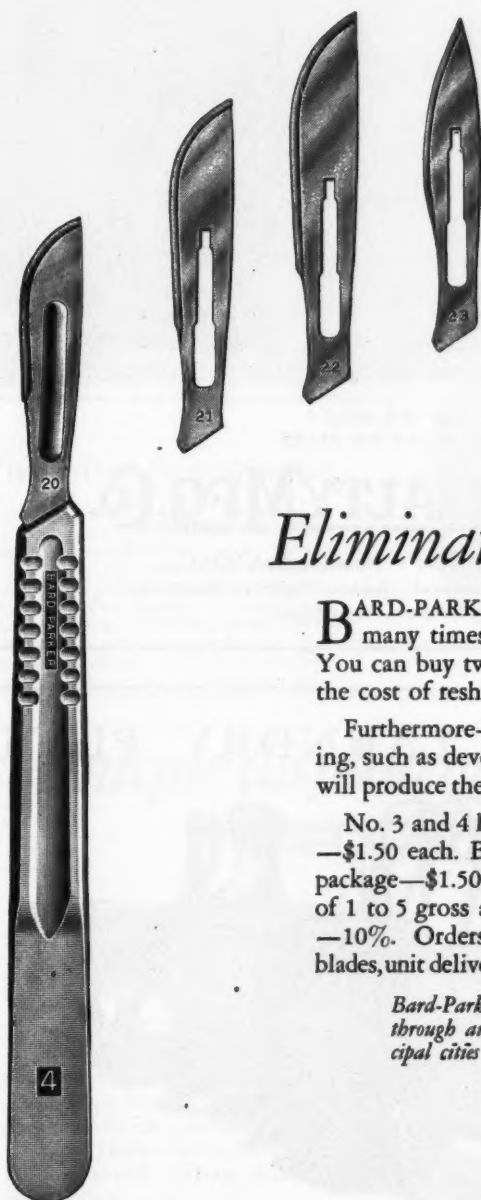
VICTOR X-RAY CORPORATION OF CANADA, LTD.

WINNIPEG—Victor X-Ray Corp. of Canada, Ltd., Medical Arts Bldg.
TORONTO—2 College St.
MONTREAL—524 Medical Arts Bldg.

VANCOUVER—Victor X-Ray Corp. of Canada, Ltd.
Motor Transportation Bldg., 570 Dunsmuir Rd.
DETROIT—For Essex County: 617 Charlevoix Bldg.

<p>X-RAY Diagnostic and Deep Therapy Apparatus. Also manufacturers of the Coolidge Tube</p>		<p>PHYSICAL THERAPY High Frequency, Ultra-Violet, Sinusoidal, Galvanic and Phototherapy Apparatus</p>
--	--	--

Please refer to THE CANADIAN HOSPITAL when writing



It's Sharp

Eliminate Resharpening

BARD-PARKER KNIVES will save the hospital many times over the expense of resharpening. You can buy two new keen Bard-Parker blades for the cost of resharpening one ordinary scalpel.

Furthermore—only a special method of sharpening, such as developed by the Bard-Parker Company, will produce the keenness of a new Bard-Parker blade.

No. 3 and 4 handles—\$1.00 each. No. 5 handles—\$1.50 each. Blades—one half-dozen of a size per package—\$1.50 per dozen. *Quantity discounts:* Orders of 1 to 5 gross assorted sizes of blades, unit delivery—10%. Orders of 5 gross or more assorted sizes of blades, unit delivery—15%. Send for illustrated circulars.

Bard-Parker products sold direct to consumers through authorized Agents—located in principal cities of the United States and Canada.



BARD-PARKER COMPANY, INC.
150 Lafayette Street, New York, N.Y.

SECURITY FOR HOSPITAL RECORDS

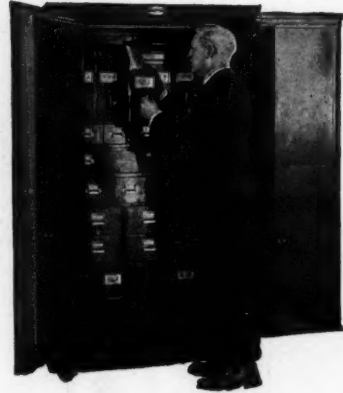


"Office Specialty"
X-ray File No. 2838
of special FIRE-WALL
construction.

An "OFFICE SPECIALTY" X-ray File of Steel provides safety and quick reference facilities for X-ray films. It takes records up to 14" x 18" size. The drawers operate on extra-smooth roller-bearing suspension arms, assuring easy operation under the heaviest load.

Investigate the merits of "OFFICE SPECIALTY" Record Safes, too. They are extra-safe in their fire protective value, carrying a high rating from the Underwriters for performance against fire, impact and explosion.

*Ask for our catalog
and illustrated price list.*



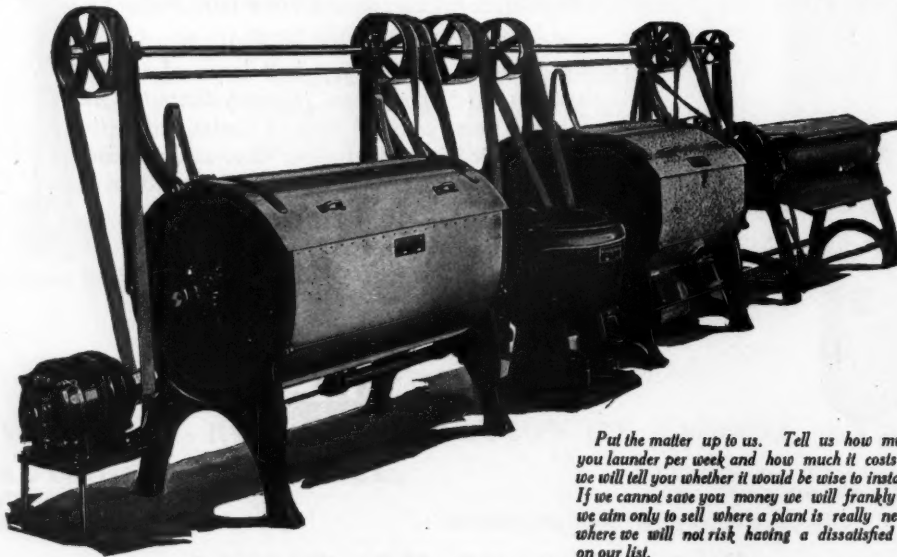
**WE MAKE WHAT WE SELL
AND GUARANTEE WHAT WE MAKE**

THE OFFICE SPECIALTY MFG. CO. LIMITED

Home Office and Factories: - Newmarket, Ont.

Branches: Toronto, Ottawa, Montreal, Quebec, Halifax, Hamilton,
Winnipeg, Regina, Calgary, Vancouver.

DO YOU NEED A LAUNDRY PLANT?



Put the matter up to us. Tell us how much linen you launder per week and how much it costs you and we will tell you whether it would be wise to install a Unit. If we cannot save you money we will frankly say so—we aim only to sell where a plant is really needed and where we will not risk having a dissatisfied customer on our list.

The Beaver Laundry Machinery Co., Limited

MANUFACTURERS

393 SORAUREN AVENUE

- - - - - TORONTO, ONT.

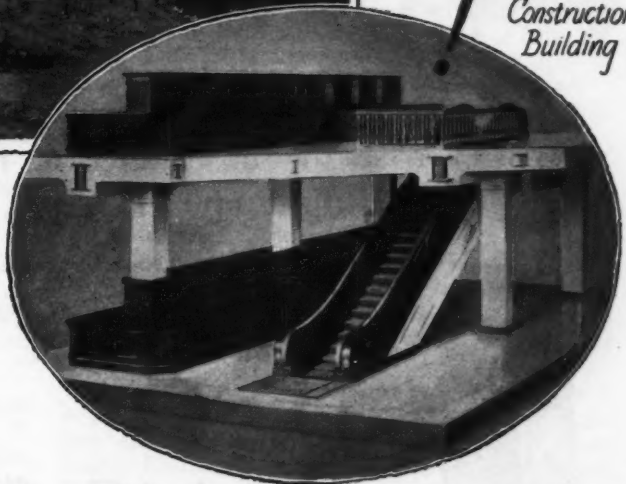
Please refer to THE CANADIAN HOSPITAL when writing

Otis-Fensom invites you



to the
Canadian
National
Exhibition
Toronto
Aug 27
to Sep 10

Booths
106-107
121-126
Construction
Building



Two Miniature Models

Above is from photo of wax model of the new Eastern Entrance to the Canadian National Exhibition. At right is shown one of the mechanical models of Otis-Fensom elevator equipment in miniature to be on display in actual operation. Upon entering through the above monumental gate, approach the Construction Building in a north-westerly direction, where you are invited to view

Most unique display of Elevator Equipment ever presented

Included in the display will be:

1. A gearless traction passenger elevator machine in operation.
2. An elevator control panel in operation.
3. A motor generator set with starter and car switch, operating.
4. The above illustrated miniature model of escalator in full operation.
5. Genuine Peelee doors for freight elevators.
6. Hollow metal sliding doors for elevator entrances.

7. Hollow metal swing doors for interior work.
8. Otis roller bearing door hangers.
9. Otis door closers and interlocks.
10. Mechanical dial indicators.
11. Push button boxes.
12. Atlas elevator guide lubricators.

We wish to particularly emphasize the fact that these products are all made in Canada by the Otis-Fensom Company Limited, operating at Hamilton, Ontario—the most complete elevator plant in the world.

OTIS-FENSOM ELEVATOR COMPANY LIMITED

GENERAL OFFICES AND WORKS: HAMILTON, CANADA

Calgary, Alta.
Edmonton, Alta.
Halifax, N.S.
Hamilton, Ont.

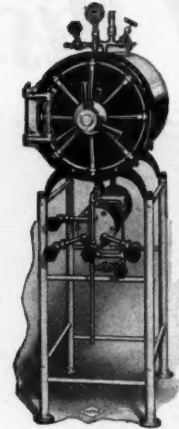
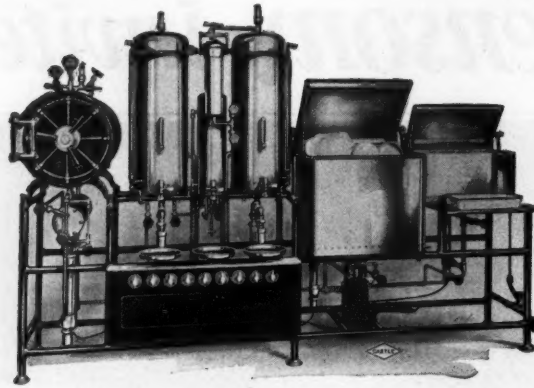
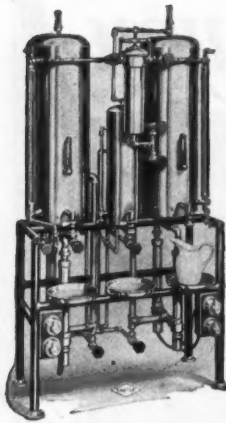
Kitchener, Ont.
London, Ont.
Montreal, Que.
Ottawa, Ont.

Quebec, Que.
Regina, Sask.
St. Catharines, Ont.
St. John, N.B.

Winnipeg, Man.

Toronto, Ont.
Vancouver, B.C.
Victoria, B.C.
Windsor, Ont.

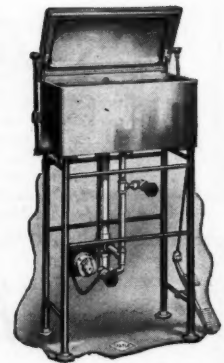
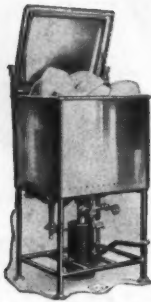
Please refer to THE CANADIAN HOSPITAL when writing



Selected by Engineers for mechanical perfection, and by Hospitals for observance of the most rigid technique.

Recently installed at

Central Railway of Georgia Hospital.	Savannah, Ga.
General Electric Co. Hospital.	Fort Wayne, Ind.
General Motors Inc. Hospital.	Pontiac, Mich.
Receiving Hospital.	Detroit, Mich.
Misericordia Hospital.	Ottawa, Ont.
Amesbury Hospital.	Amesbury, Mass.



CASTLE

Sterilizers for Hospitals, Surgeons, and Laboratories
WILMOT CASTLE CO. 1902 University Avenue ROCHESTER, N. Y.



Please refer to THE CANADIAN HOSPITAL when writing

THE Canadian Hospital

Published in the interests of Hospital Executives

ISSUED ON THE FIRST
OF EVERY MONTH BY

THE EDWARDS PUBLISHING COMPANY

434 KING STREET WEST
TORONTO 2 - CANADA

Member of Canadian Business Publishers' Association

Telephone
MAIN 3799



Subscription Price
\$2.00 per Year

Vol. 4

AUGUST, 1927

No. 8

Hospitals Pay Great Dividends

As an indication of the improvement in hospital facilities during the past few years, Dr. W. T. McEachren, of the American Hospital Association, at a luncheon in the Public General Hospital, Chatham, Ont., pointed out the great reduction in the number of days the average patient remains in the institutions now as compared with some years ago. In 1900 from thirty to forty days was the average per patient and this has been reduced to from twelve to fifteen days at the present time, due to the improvements inaugurated in hospital practice.

"Sometimes we think a hospital is a place to spend money. A hospital well run, well conducted, with a good staff of nurses and an efficient corps of doctors, is rendering the community a service that in actual cash value is greater than any other utility," he said.

"The best kind of a hospital is operated by the voluntary system, subsidized, and with a board of control such as you have in Chatham. In the United States they are going into the county hospital system quite extensively but with one or two exceptions they are having trouble. I am not in sympathy with the county or the municipal hospital system. It is a great thing to have the nurses and doctors, board of trustees, city and county councils working together as you have here. It is a fine thing to see, in these busy times, business men giving a portion of their time to serve on the hospital board and to have them attend a function such as this, and be able to have the city and county councils represented by the mayor, warden, aldermen and councillors.

"If we could capitalize the lives saved last year in

the hospitals, capitalize the lives saved from invalidism, capitalize the lives of the nurses that are trained and the by-products of the hospital, it would make the city budget look small.

"Last year there were 1,538 patients treated in this hospital. Authentic statistics show us that at least ten per cent. of the lives of patients that come into a well-conducted hospital are saved. That is, at least ten per cent. of the patients that go to the hospitals would have passed away or become invalids, if they had not been treated in such an institution.

"On that basis there were 153 lives saved in this hospital last year, at least, and I am confident that the rate would be much higher than ten per cent. Actuaries tell us that a human life is worth \$6,000. Multiply this sum by 153 and you have \$900,000, nearly a million dollars. This hospital turned back to the community last year a dividend of \$900,000, and it cost probably \$90,000 or \$100,000 to operate, practically all of which was paid by the patients."



Planning the Nurses' Residence

At a time when nearly every hospital with any pretensions as to size or completeness is considering the possibilities of building a separate nurses' residence (if they are not already so fortunate as to have one), the report of the committee on buildings presented to the American Hospital Association on "Planning a Nurses' Home," is very interesting and helpful.

An itemized list of building requirements for a large residence is given under the following headings: Site and Location; Capacity; Estimated Cost; School Features; Administration; Reception and Living Rooms; Accommodations for Non-Resident Nurses; Recreation; Food Service; Dormitories; General Storage; Elevator Service; Heating and Ventilation; Lighting; Lighting Fixtures; Plumbing; Construction and Finish.

A very necessary warning is emphasized that any attempt to incorporate in the plans and specifications of a hospital building all of the equipment, conveniences and refinements which the report suggests, would result in raising the cost to a prohibitive figure. The building programme of a modern hospital, however, should be formulated with due regard to every known requirement and every expressed demand, whether reasonable or unreasonable, and the test of service value should be applied to each item which is eventually awarded a place in the actual plans and specifications.

The American Hospital Association, we are sure, will be glad to send copies of the report to any who are interested.



The Service Clubs a Big Asset

It is becoming more and more appreciated by hospital workers, especially in our cities, that the service organizations or "luncheon clubs" are a most valuable community asset.

Hospitals, children's homes, supervised playgrounds, summer camps and a variety of other institutions for public welfare owe their establishment or

their maintenance to their unselfish efforts. One does not need to seek far for evidence of service given, nor require a very intimate knowledge to realize the value of the work being done.

The Rotary, Kiwanis, Gyro, Optimist and Kinsmen Clubs have all accomplished splendid work in the promotion of community welfare, and those whose life-work is devoted to hospital interests fully appreciate the assistance and co-operation of these energetic, unselfish and resourceful men who form the personnel of the various service organizations.

Trend of Raw Cotton Prices

Quotations on the New York Cotton Exchange as quoted in the Daily News Record:

December 3, 1926, Spot Cotton, \$12.15; January 3, 1927, \$12.80; February 3, 1927, \$13.80; March 3, 1927, \$14.65; April 4, 1927, \$14.30; May 3, 1927, \$15.95; June 3, 1927, \$16.85; July 2, 1927, \$17.15; July 9, 1927, \$17.35; July 16, 1927, \$18.30.

This shows an advance of more than fifty per cent. over the low price of December last, and it has been reflected in the price of the finished fabric. All the cotton mills have advanced their prices from five per cent. on the very light-weight cloths to as high as twenty per cent. on the heavy-weight fabrics.

Toronto Sick Children's Hospital

Premier G. Howard Ferguson laid the cornerstone of the new branch of the Hospital for Sick Children, Thistletown, Ont., on July 4.

The building, which is situated on a hill sloping down to the Humber, one and a quarter miles northwest of Thistletown on the old George Rowntree farm, will contain administrative offices, storerooms and wards, accommodating 112 beds. It will be completed by January 15.

In time two wings, each containing 100 beds, will be added to the structure.

Among those present at this function were: Mr. Watson Swaine, Superintendent of the Hospital; Miss K. Panton, Superintendent of Nurses; Mr. Loftus Reed, Chairman of the Board of Education; Mr. J. J. Dixon, President of C.N.E., and Mrs. Dixon; Mr. H. C. Schofield, M.P.P.; Mr. George Shields, M.P.P.; Mr. P. W. Ellis, Chairman of the T.T.C., with his daughter; Mrs. J. D. Thomas and his grandchild, Miss Mary Thomas; Dr. W. E. Gallie, Surgeon-in-Chief; Dr. Harold Parsons, Dr. and Mrs. Geo. D. Porter and Miss Porter.

Officers of Saskatchewan Hospital Association

The following officers were elected at the convention of the Saskatchewan Hospital Association, held in Regina on July 7 and 8: W. E. Stephenson, Moose Jaw, president; D. H. Leonard, Lloydminster, first vice-president; V. A. Sandt, Prince Albert, second vice-president; J. J. Willet, Unity, third vice-president; G. E. Patterson, Regina, secretary-treasurer.

Miss Mathieson Presented with Portrait



Miss Kale Mathieson

Superintendent Toronto's Isolation Hospital

From a portrait presented to Miss Mathieson by the Alumnae Association of the Hospital

Addition to Moose Jaw General

Three contracts for the new wing of the City General Hospital, Moose Jaw, were let by the City Council, and work will be started at once. The general contract was let at a price of \$81,700, contract for heating and plumbing at \$10,772, while for the electric equipment a tender of \$3,590 was accepted.

It was decided to have terrazzo floors at additional cost of \$475, and "Durasco" on the bathroom walls at an additional price of \$70, so that the total cost of the building, apart from furnishings, will be \$96,607.

It is anticipated that the furnishing of the new wing will cost in the neighbourhood of \$15,000, so that the total cost of the addition to the hospital, which will provide adequate accommodation, so far as can be foreseen at the present, for some time to come, will be well under the sum for which a by-law was submitted to the ratepayers, when sanction was given to borrow a sum of \$130,000, by the issue of debentures, to cover the cost of the new structure.

FORT WILLIAM, ONT.—The Fort William Rotary Club will furnish a private ward in McKellar General Hospital, it has been announced by President A. F. Hawkins.

TIMMINS, ONT.—St. Mary's Hospital will add a wing to their hospital here. The cost will be \$125,000.

TORONTO HOSPITAL FOR CONSUMPTIVES

By LEREINE BALLANTYNE

When one enters the grounds of the Toronto Hospital for Consumptives and the Queen Mary Hospital for Consumptive Children, at Weston, Ont., one is struck with the fact that it is not so much a hospital as a complete community. On all sides of the spacious grounds are buildings of different sizes and for various purposes, from the tiny gate office to the imposing central building.

In this country of pioneers we realize what tremendous pioneering work must have been done in this particular institution under the able guidance of Dr. J. W. Dobbie, physician-in-chief, when we remember that the first portion of the Hospital, when erected in 1904, contained only accommodation for thirty patients, while to-day there are nearly four hundred being treated. Of these three hundred are adults, and about ninety are children. To care for these a staff of sixty nurses, one hundred employees, four physicians, one laboratory specialist, and two dietitians are employed.

All employees have accommodation in buildings separate from the hospital and each has an individual bedroom. The nurses' home, or rather "The Connaught Home for Nurses," is a magnificent building, equipped with separate rooms for the nurses, reception rooms for the juniors and seniors, and with a radio outfit installed for the entertainment of those off duty.

In the hospital each adult patient has a radio connection at the head of the bed, so that all can listen in on the concerts being broadcast at their own inclination, without disturbing their neighbours. To patients shut away from the world for long periods this means recreation and entertainment impossible for those outside to estimate in pleasure-giving possibilities. Not only that, but once a week the head physician from a central broadcasting microphone, gives each patient in the hospital a radio talk on the treatment they are receiving, and the necessity of following certain rules, in the tedious but usually sure way of coaxing back health to failing bodies.

"Generally speaking, what is your process of treatment?" we inquired.

"Rest, Rest and REST, with every letter a

capital," was the reply.

Rest is emphasized in every phase of the work.

Diet has the next important place.

Fresh air is valuable, and sunshine, also, but patients are not exposed to night air at this hospital. No one sleeps on the verandah all night, and while

there is plenty of fresh air supplied in the rooms, the air is warmed to give comfortable breathing to the patient.

Then there are special forms of treatment given to suit individual cases. In other words, what helps one might not help another, and each case is studied carefully and its needs supplied with such treatments as:

The Pneumothorax treatment.

The Heliotherapy treatment.

Tuberculin treatment.

Vaccines, in some cases.

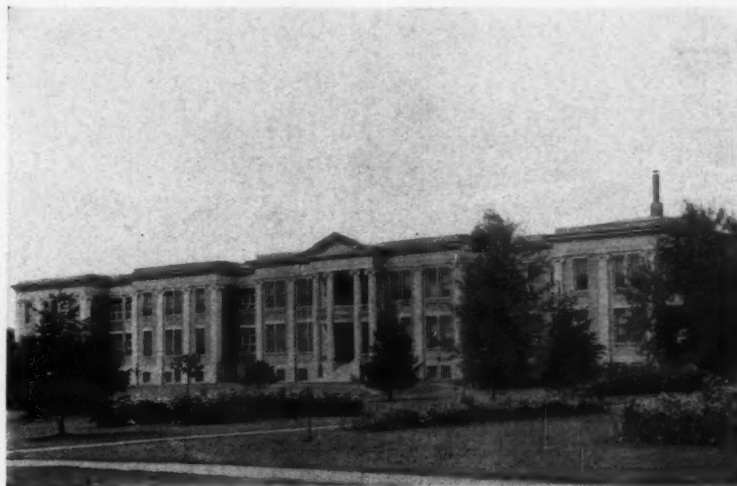
Electrical, such as the H.F.C. treatments.

Galvanism.

And the Ultraviolet light when Heliotherapy is impractical.

Although a great many of the cases admitted here are in advanced stages, a large percentage is sent away in the course of time, cured and with a second chance in the world again. This was brought home vividly by the large number of pavilion patients one finds. After a patient has reached the point where the disease is arrested, the temperature is restored to normal, and weight is steadily gained, the patient is removed from the hospital proper, and placed in what seemed to be an endless row of pavilion buildings, where they live, each in a separate room, with the best of food, fresh air and sunshine to complete the already developing health within them. When the cure is complete the patient is discharged from the pavilion.

There are many novel occupations provided for the patients. One young man conducts a little shop where the other patients may purchase papers, ice cream and various necessities, thus obviating the need of their leaving to visit local stores, which certainly would not be desirable. It is, of course, also a source of income and interest for the man who runs it.



Main Building, Toronto Hospital for Consumptives, Weston, Ont.

Another little cottage is occupied by women doing work for the hospital in the capacity of employees. These women are not fit to work under ordinary living conditions, but can make a fair living, and continue regaining their health under the influence of good food and regular hospital conditions, while on the last period of their cure.

The Hospital at Weston was the first institution in the Toronto district to introduce physical education for the student group of nurses in training and the first to introduce occupational therapy for patients.

In the Queen Mary Hospital for Consumptive Children, which is across from the main building, one finds it very difficult to describe the organization of the place, in fact one does not even think about it, so interesting are the tiny patients. All the way from a little black Topsy with corkscrew curls, little Indian boys from the far north on whom the white man's living conditions have put the deadly mark, to fair-haired English children by the score. Some are so bright and playful one wonders how it be possible ill-health lurks behind their jolly little inquisitive smiles as they scamper through the playground, which, by the way, is in a beautiful valley on the banks of the Humber river, surrounded on all sides by wooded hills. It is enclosed by high wire fencing, and was equipped by the school children of Toronto and suburban districts through the sale of Christmas Seals in 1922-1923. Little one thinks, when purchasing a package of seals at Christmas that the money is going to give such an endless source of happiness to these unfortunate but bonny children. Swings, slides, a bathing tank and all the mediums of fun found in the usual school playground are here.

In the building there are rooms set apart for school. Two qualified teachers sent out from Toronto by the Board of Education teach the little ones their lessons, so that time is not lost while restoring them to health. A splendid library, donated by kind friends, is at the disposal of the kiddies and here they may read everything from the Burgess stories of Peter Rabbit to the Knights of King Arthur's Round Table. In a vocational room domestic science is given to the girls in a well equipped department, where electric stoves for indi-

vidual pupils aid in the cooking, and a machine in the sewing room helps with the long seams in making little gowns and dresses for the workers and fellow patients.

In another building, where tots from one day up to six years are cared for, these little ones born of consumptive parents are given a chance to gain the highroad of perfect health free from the contagious atmosphere to which they would be subjected in the

home. One little curly-haired darling in this department was born in the Hospital six years ago. Her mother died there, and Rosie has never known a real mother's love, but her foster mothers among the nurses are many, for her tiny arms go out to all in that department with an air of real proprietorship.

In the juvenile and in the main buildings

are dining rooms for those able to go for their meals. These are done in red tile on the floor, small tables to seat four, with marble top, and the rooms are clean and pleasant in appearance. Separate dining rooms are provided for male and female patients, and in the big kitchen the food is prepared by a chef and three or four assistants. There is also a separate dining room for employees, as well as for nurses.

A special diet kitchen to train nurses in diet therapy is provided in the King Edward Building, and special treats for patients from time to time are also prepared here.

Bright, well-equipped student lecture rooms are in this building, where both juniors and senior nursing classes receive instruction, and also classes of affiliating students from other hospitals take the special course afforded here. These come from ten outside centres, including Barrie, Stratford, Midland, Orangeville and as far north as North Bay. Resident nurses here go to Fordham University Hospital, in New York, and two months to Riverdale Isolation Hospital where they complete their course.

There are no graded rates at this hospital. The flat rate is \$10.50 per week, with the small additional bonus granted by the government for each case. If the patient cannot pay this amount the municipality to which he belongs is expected to pay it and all are admitted on the same basis and receive the same individual care and attention. This, of course, does not cover the attention and treatments given in many



Main Building, Queen Mary Hospital for Consumptive Children, Weston, Ont.

Canada's Leading Hospitals



VANCOUVER GENERAL HOSPITAL

A VIEW of the attractive main unit, erected at a cost of \$270,000 and opened early in the year, is part of a building programme that will include maternity, children's and women's hospitals, as well as a separate building of private wards. The new isolation



KEEPING DOWN REFRIGERATING PLANT COSTS

By C. T. BAKER,
Consulting Engineer,* Atlanta, Ga.

In the modern hospital, as in other institutions, mechanical refrigeration and man-made ice have materially increased the facilities for service in many directions and it is probable that refrigeration will play an increasingly important part in the future.

In far too many hospitals the refrigerating plant is in an inaccessible place, which makes it difficult for the engineers and attendants to care for the equipment properly, with the result that often little attention is given to it and it is allowed to deteriorate.

One of the principal requisites of the hospital ice making or refrigerating plant is cleanliness and sanitation, and along with the routine of plant operation goes the necessity for rigid adherence to good house-keeping methods by those charged with the plant upkeep.

In hospitals where the refrigerating plant includes an ice-making system for producing ice in sufficient quantities to supply the institution's requirements, it not infrequently happens that the ice-freezing tank and surroundings are found upon examination to be unsanitary. A concrete example will illustrate this. In a certain plant of this kind the analysis of the water in the ice cans showed a high bacteria count and colon bacilli were also present. Investigation disclosed that the trouble was caused by filth and dirt being deposited on the freezing tank top from the shoes of certain of the employees who used the tank room as a short cut to reach other parts of the building. This practice was stopped, the tank room and tank top thoroughly cleaned and two additional windows were provided in one wall to give more light and sunshine. The water troubles then disappeared.

Freezing Does Not Kill Bacteria

In some quarters the idea prevails that the freezing process destroys all bacteria, but this is not by any means true. Many bacteria are killed, to be sure, but they are mostly of a harmless variety, while the bacteria responsible for typhoid and intestinal troubles are, in the majority of instances, not killed, but simply rendered temporarily inert.

To insure that the ice supply will be safe and free from contamination it goes without saying that the water supply must be fully protected by sanitary measures, from its source to the time it is frozen and placed in the refrigerated storage or holding room.

Judging from the manner in which many of the storage rooms and small refrigerators are neglected, it appears that these facilities are supposed to be foolproof, or to possess the inherent ability of automatic cleaning, as well as being permanently immune from contamination. This is far from the truth. The only method that can keep these refrigerators sanitary is well directed and frequent attention on the part of those in charge of such equipment.

All refrigerators should be cleaned often enough to insure sanitation, and foodstuffs, such as vegetables, should not be carried for any great length of time at temperatures not low enough to prevent decay. Any

vegetables showing unmistakable signs of decay should be promptly removed and discarded. One head of cabbage, for example, in the early stages of decay will produce objectionable odours in the refrigerator which might easily be absorbed by other food products, particularly by all kinds of dairy products.

Wherever possible dairy products, such as milk, cream and cheese, should be stored in a refrigerator separate from other food products, and in so far as is possible, correct temperatures should be maintained in all refrigerators. The temperature to be maintained depends, of course, upon the character of the product carried in the various refrigerators.

Keep in Good Running Order

Most hospital refrigerating and ice plants are electrically driven, that is, the ice machine, brine pump and water pump are operated by electric motors, and usually current for the operating of such machinery is purchased from the local power company. Consequently, it always pays to maintain the machinery in good condition, otherwise power costs will be unnecessarily high.

One of the contributing causes of high power cost is neglect properly to insulate the cold pipe lines, that is, piping systems through which low temperature ammonia and brine are circulated. Where such piping systems are not properly insulated, heat is taken up from the surrounding air to such an extent that much of the refrigerating capacity of the plant is dissipated in doing unnecessary work. In addition the net capacity of the plant is reduced, which requires the machinery to be run a greater number of hours a day in order that it may properly handle the work for which it was installed. This in turn means added increase in the consumption of electricity.

Pipe covering, while costing money to install, will pay large dividends in saving operating expense, and if properly installed and maintained it will last indefinitely.

Another source of high power cost in the refrigerating plant is the loss that is caused by the ammonia compressor being compelled to operate against excessive or abnormal condensing pressures.

If the hospital has available sufficient cooling water to be used over the ammonia condensers for the purpose of liquifying the superheated ammonia gases, it is easy to predetermine within very close limits what the discharge pressure should be for the conditions under which the plant is being operated. Ordinarily, these pressures will vary from, say, 150 to 185 pounds. However, the lower the pressure the less power will be required to operate the machine, and it always pays for the engineer to clean the condensers often enough to insure that they will be free from foreign matter or scale deposited by the cooling water. He should also purge the ammonia system as often as may be required in order that the non-condensable gases, which are one of the principal

contributing causes of high condensing pressures, may be removed.

At the present time it is possible to purchase automatic non-condensable gas separators, which will continuously and automatically remove from the ammonia system air and other non-condensable gases that cannot be condensed and which, if allowed to remain in the system, will take a heavy toll in power consumption. Such automatic devices usually pay for themselves in the saving of power and increase in capacity in about two years' time.

Another contributing cause of high power cost in the refrigerating plant results from carelessness in the installation of the brine and water piping systems. Too often incorrect pipe sizes are used which result in excessive friction. Then again, one often finds a multiplicity of right angle elbows and sharp bends, which also increase the friction of the water or brine flowing through the system. This in turn means that more power is required to circulate a given amount of water or a given amount of brine in a stated time. A little common sense and care exercised in laying out such piping systems will pay handsome dividends in the saving of power later on.

Free Ammonia System from Oil

Still another source of loss in capacity and high power bills is the presence of oil in the ammonia system, particularly in what is known as the low pressure or evaporating side of the plant. Oil that finds its way into the coils of the brine tank, or into any part of the system for that matter, retards evaporation because of its insulating qualities. Consequently it is more difficult to maintain proper temperatures, and the machinery has to be run a greater number of hours to get the refrigerating effect that would be obtained in a lesser number of hours were the system entirely free from oil. The operators should, of course, watch this point closely and drain the oil out at regular intervals, say once a week or more if necessary.

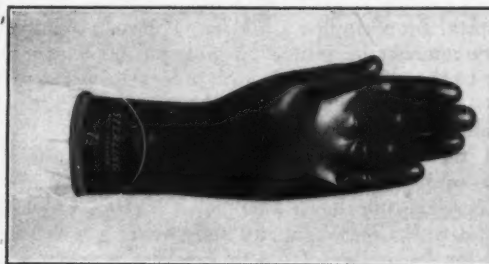
In some refrigerating plants it is necessary to use one or more belts as a means of transmitting power from the motor to the machines. Often one finds the operator using rosin, white powders and other nostrums on the belts, to prevent slippage. The use of these, while affording temporary relief to a slipping belt, will, in the end, result in complete ruination of the belt if the practice is continued over a long period.

If the belt slips there is some good reason for it: either the belt is overloaded, the pulleys out of alignment or pulley sizes incorrectly proportioned; or perhaps the belt speed may be too high or too low for the particular application. In any event steps should be taken to correct the trouble, instead of resorting to first-aid methods or tightening the belt, as is sometimes done, because either method not only ultimately destroys the belt but adds materially to the power required to drive it.

It is often thought that because a refrigerating plant is small and the total capacity of motors installed does not exceed, say, fifteen to thirty horsepower, the power consumption when compared with other developments may not be of great moment. However, it

(Continued on Page 35)

Sterling SURGEON'S GLOVES THE REINFORCING BAND



Notice how securely and comfortably the gown is held in place. The sleeve and glove both remain secure without further attention.

This is made possible by the strong reinforcing band at the end of the extra long gauntlet—features found only in the highest grade gloves.

Sterling Made in Canada Surgeon's Gloves, embody every worthwhile feature.

Sterling Rubber Company LIMITED

GUELPH - CANADA

Largest Specialists in SEAMLESS Rubber Gloves
in the British Empire.

A pure, efficient cleanser

GREEN SOAP

HARTZ

Prepared from the highest grade of vegetable oils only, saponified by pure Potassium Hydroxide. Green Soap (Hartz) is all pure soap, economical in use, and will give absolute satisfaction.

Write for prices and samples

Manufactured by

The J. F. Hartz Co., Limited

Pharmaceutical Manufacturers

TORONTO

MONTREAL

Please refer to THE CANADIAN HOSPITAL when writing

SHRINER HOSPITAL'S BOY SCOUT TROUP

By LOUISE M. DICKSON, R. N.,

Superintendent, Shriners' Hospital for Crippled Children, Montreal, Que.

In view of the short notice to replace my superior, Miss Florence J. Potts, director of nursing, Shriners' Hospital for Crippled Children, I crave indulgence if my remarks be somewhat general and have reference to the work in which I am presently and particularly engaged as superintendent of the Shriners' Hospital for Crippled Children, Montreal.

I feel, however, I may with some pardonable pride make reference to the work being done in the Shriners' Hospitals for Crippled Children, especially as the work opens, in my judgment, a specialized field for the nurses of North America, a specialty of great value and of peculiar interest in these times.

The Shriners of North America have to-day a membership of some six hundred odd thousand distributed throughout the United States and Canada. About the close of the great war and with the return of many of the Shrine members from abroad, the thought became prevalent as to a definite line of work which would serve as a memorial to those who had made the supreme sacrifice and contain the interest of this vast membership, and after discussion it was determined that hospitals having for their purpose the care of underprivileged and crippled children under fourteen years of age, irrespective of race or creed, would best serve the thought of the organization, and so, at fourteen different points throughout the United States and Canada, ten hospitals and four mobile units have been established and, at the expense of the Shriners of North America, are being operated and maintained.

Units have been established in Shreveport, La.; San Francisco, Cal.; Portland, Ore.; St. Louis, Mo.; Twin Cities Unit, Minn.; Springfield, Mass.; Chicago Ill.; Philadelphia, Pa.; Lexington, Ky.; and Montreal, Can.; and mobile units at Spokane, Wash.; Salt Lake City, Honolulu and Winnipeg. It will be seen that the only one of these hospitals in Canada is situated in Montreal, and the mobile unit in Winnipeg. Let me explain what is meant by a mobile unit.

Responsible for Ward

A ward of twenty beds in a general or children's hospital is taken over by the Shriners, equipped, staffed and maintained by them in exactly the same way as the major hospitals are maintained.

The hospitals are generally 50-bed units, although the ones located at St. Louis and Philadelphia are each 100 beds. There are thirteen superintendents chosen from the outstanding training schools for nurses, and eighty graduate nurses. In Montreal we have the advantage of having affiliated students, these students coming to us from the various training schools for a two months' course, leading to a certificate which is credited in their three years' training.

The Shriners' Hospitals for Crippled Children are open to every crippled child in North America, without regard to race, colour or creed, subject to the following requirements:

1. The parents or guardian must be financially unable to pay for its treatment.
2. The child must not be over fourteen years of age.
3. He must be of normal mentality.
4. There must be reasonable hope of materially improving the child's condition through orthopedic surgery.

It will be seen that this work is unique in the fact that we are dealing only with the underprivileged child.

We have found, therefore, that the moral and mental aspect of their treatment must be considered as well as the physical. For this reason let me give you just one instance of what is being accomplished along this line.

Employ "Honour System"

In the Montreal unit has been formed, through the interest and effort of the "Big Brothers' Association" and the "Boy Scouts," a "Hospital Boy Scout Troop," fully registered, the only "Hospital Troop" in Canada. The "honour system" which is embodied in the Scout rules, the games of competition, the tests of observation, have been a marvelous stimulus in the minds of the children, leading to accuracy of statement and truth, which I know you will agree with me is of the utmost value. And so we try to send these children—the citizens of to-morrow—back to their homes not only with body restored, but with mind enriched.

In the United States and Canada we have few reliable figures as to the number of physically deformed children. Germany and England record the number of crippled or deformed people within these countries. Sir John Byers is quoted as saying that there are half a million cripples in Germany and that the census of England classes over 400,000 as deformed. The number of crippled children under the age of fifteen in Germany is given by Professor Lange as 98,000. If the number of children in the United States and Canada bears the same proportion to the general population as in Germany and England, we would have 125,000 crippled children under fourteen years of age. I mention these figures so that the extent and the possibility for this specialty may be apparent and, if one recalls the history of the science of orthopedics, one will appreciate that it has remained almost for our own generation to realize how much can be done to restore the underprivileged child to anything like equality with his fellows.

The American Orthopedic Association has defined orthopedic surgery as "the art of surgery which has to do with the deformities and disabilities of the apparatus of locomotion." Thus orthopedic surgery may be defined as the surgery dealing with bones, joints and deformities. Let me mention some of the causes leading to the particular cases in the Shriners' Hospitals, in order that we may appreciate the value



The New Philadelphia General Hospital

A FAMOUS HOSPITAL WHERE D&G SUTURES ARE USED

Kalmerid Catgut

GERMICIDAL. Exerts a bactericidal action in the suture tract. Supersedes the older unstable iodized sutures. Impregnated with the double iodine compound, potassium-mercuric-iodide.† Heat sterilized.



The boilable grade is unusually flexible for boilable catgut; the non-boilable grade is extremely flexible.

TWO VARIETIES

BOILABLE*	NON-BOILABLE
NO.	NO.
1205.....PLAIN CATGUT.....	1405.....
1225.....10-DAY CHROMIC.....	1425.....
1245.....20-DAY CHROMIC.....	1445.....
1285.....40-DAY CHROMIC.....	1485.....

Sizes: 000..00..0..1..2..3..4

Approximately 60 inches in each tube

Package of 12 tubes of a size.....\$3.00
Less 20% on gross or more or \$28.80, net, a gross

Claustro-Thermal Catgut

ASEPTIC—not germicidal. Sterilized by heat after the tubes are sealed. Boilable.* Unusually flexible for boilable catgut.

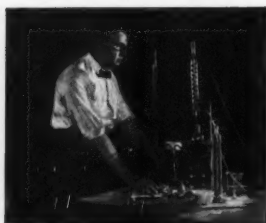


NO.	
105.....	PLAIN CATGUT
125.....	10-DAY CHROMIC CATGUT
145.....	20-DAY CHROMIC CATGUT
185.....	40-DAY CHROMIC CATGUT

Sizes: 000..00..0..1..2..3..4

Approximately 60 inches in each tube

Package of 12 tubes of a size.....\$3.00
Less 20% on gross or more or \$28.80, net, a gross

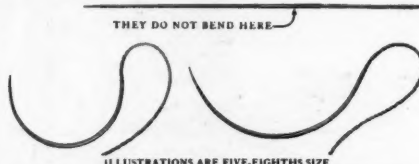


D&G Sutures are always found neutral under the most delicate titration tests. This is one of the reasons they uniformly behave well in the tissues.

Atraumatic Needles

FOR GASTRO-INTESTINAL suturing and for all membranes where minimized suture trauma is desirable. Integrally affixed to 20-day Kalmerid catgut. Boilable.*

Experimental evidence has proven 20-day chromic catgut the most suitable for gastro-intestinal suturing. It has been found that gastric wounds are fully healed within 12 days, and intestinal wounds at 16 days. At these periods the 20-day catgut (regardless of size) still retains, respectively, 60 per cent and 30 per cent of its initial strength.



ILLUSTRATIONS ARE FIVE-EIGHTHS SIZE



STRAIGHT NEEDLES ARE IN ROUND TUBES



CURVED NEEDLES ARE IN FLAT TUBES

NO.	INCHES IN TUBE	DOZEN
1341..STRAIGHT NEEDLE.....	28.....	\$3.00
1342..TWO STRAIGHT NEEDLES...	36.....	3.60
1343..3/8-CIRCLE NEEDLE.....	28.....	3.60
1345..1/2-CIRCLE NEEDLE.....	28.....	3.60

Less 20% discount on one gross or more

Sizes: 00..0..1

Packages of 12 tubes of one kind and size

Kangaroo Tendons

GERMICIDAL, being impregnated with potassium-mercuric-iodide.† Chromicized to resist absorption in fascia or in tendon for approximately thirty days. The non-boilable grade is extremely flexible.



NO.	
370.....	NON-BOILABLE GRADE
380.....	*BOILABLE GRADE

Sizes: 0..2..4..6..8..16..24

Each tube contains one tendon

Lengths vary from 12 to 20 inches

Package of 12 tubes of a size.....\$3.00
Less 20% on gross or more or \$28.80, net, a gross

DAVIS & GECK INC. • 211-221 DUFFIELD ST. • BROOKLYN, N. Y.

D&G Sutures are obtainable from responsible dealers everywhere; or direct, postpaid

Non-Absorbable Sutures



NO.	INCHES IN TUBE	SIZES
350..CELLULOID-LINEN.....	60.....	000,00,0
360..HORSEHAIR.....	168.....	00
390..WHITE SILKWORM GUT..	84.....	00,0,1
400..BLACK SILKWORM GUT..	84.....	00,0,1
450..WHITE TWISTED SILK...	60.....	000 TO 3
460..BLACK TWISTED SILK....	60.....	000,0,2
480..WHITE BRAIDED SILK....	60.....	00,0,2,4
490..BLACK BRAIDED SILK....	60.....	00,1,4

BOILABLE

Package of 12 tubes of a size....\$3.00
Less 20% on gross or more or \$28.80, net, a gross

Short Sutures for Minor Surgery



NO.	INCHES IN TUBE	SIZES
802..PLAIN KALMERID CATGUT..	20..00,0,1,2,3	
812..10-DAY KALMERID "	20..00,0,1,2,3	
822..20-DAY KALMERID "	20..00,0,1,2,3	
862..HORSEHAIR.....	56.....	00
872..WHITE SILKWORM GUT...	28.....	0
882..WHITE TWISTED SILK.....	20.....	000,0,2
892..UMBILICAL TAPE.....	24...1/8-IN. WIDE	

BOILABLE

Package of 12 tubes of a size....\$1.50
Less 20% on gross or more or \$14.40, net, a gross

Emergency Sutures with Needles

UNIVERSAL NEEDLE FOR SKIN, MUSCLE, OR TENDON



NO.	INCHES IN TUBE	SIZES
904..PLAIN KALMERID CATGUT..	20..00,0,1,2,3	
914..10-DAY KALMERID "	20..00,0,1,2,3	
924..20-DAY KALMERID "	20..00,0,1,2,3	
964..HORSEHAIR.....	56.....	00
974..WHITE SILKWORM GUT...	28.....	0
984..WHITE TWISTED SILK.....	20.....	000,0,2

BOILABLE

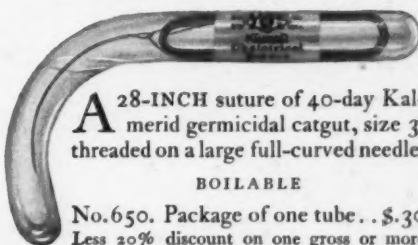
Package of 12 tubes of a size....\$2.40
Less 20% on gross or more or \$23.04, net, a gross

The ash of D&G Sutures is assayed to make sure that no traces remain of uncombined chromium nor of other residues of the chromicizing process.



Obstetrical Sutures

FOR IMMEDIATE REPAIR OF PERINEAL LACERATIONS



BOILABLE

No. 650. Package of one tube...\$3.30
Less 20% discount on one gross or more

Circumcision Sutures



A 28-INCH suture of Kalmerid germicidal catgut, plain, size 00, threaded on a small full-curved needle.

BOILABLE

No. 600. Package of 12 tubes....\$3.00
Less 20% on gross or more or \$28.80, net, a gross

Universal Suture Sizes

All sutures are gauged by the standard catgut sizes as here shown

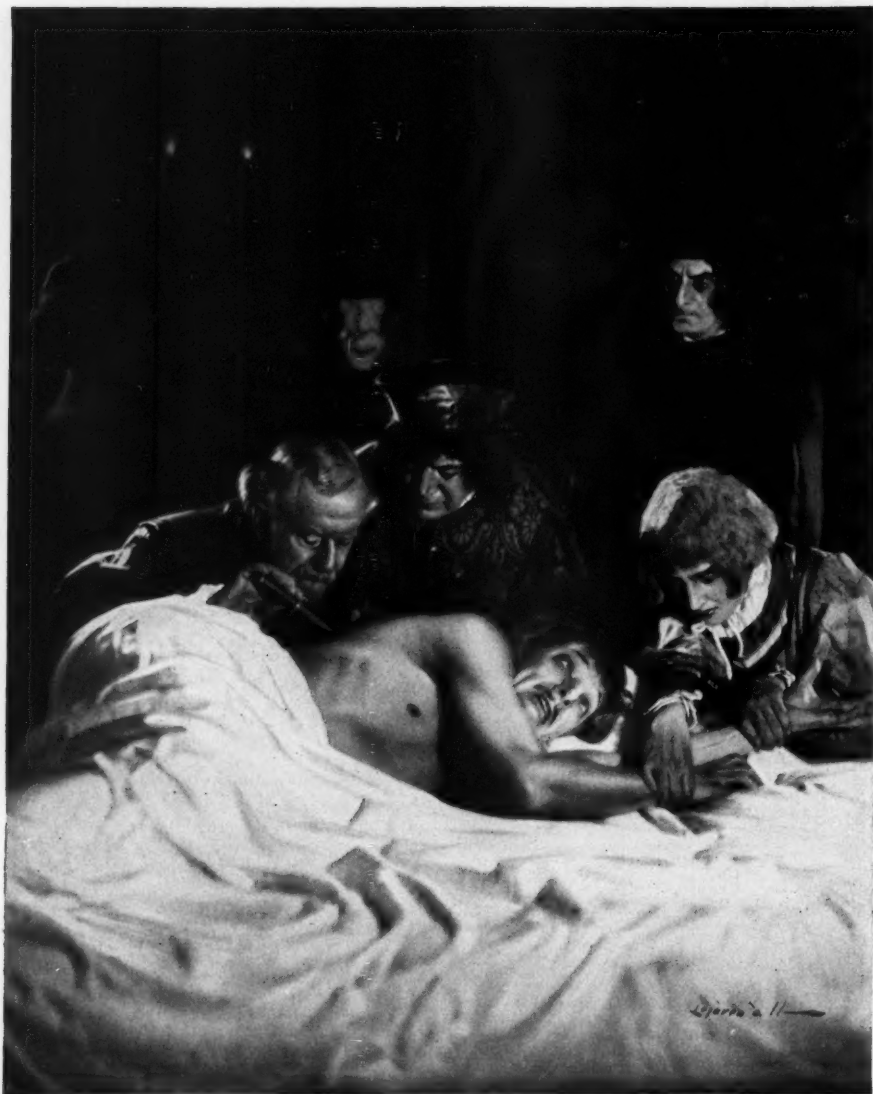
000	4
00	6
0	8
1	16
2	24
3	

*These tubes not only may be boiled but even may be autoclaved up to 30 pounds pressure, any number of times, without impairment of the sutures.

†Potassium-mercuric-iodide is the ideal bactericide for the preparation of germicidal sutures. It has a phenol coefficient of at least 1100; it is not precipitated by serum or other proteins; it is chemically stable—unlike iodine it does not break down under light and heat; it interferes in no way with the absorption of the sutures, and in the proportions used is free from irritating action on tissues.

DAVIS & GECK INC. v 211-221 DUFFIELD ST. v BROOKLYN, N.Y.

Printed in U.S.A. v The Private Press of Davis & Geck Inc. v Copyright 1927 D & G



Leonardo Bertapaglia, a surgeon and teacher at Padua in the early XVth century, did much to improve the method of ligation. While his contemporaries were using the *ligature en masse*, he isolated the vessel, tied it with linen thread, and to prevent slipping took a stitch in the vessel before completing the knots. He stressed the value of rib resection in empyema; and sutured intestinal wounds, using softened catgut for the latter purpose in preference to thread.

D&G Sutures

"THIS ONE THING WE DO"

DAVIS & GECK INC.

Shriner Hospital's Boy Scout Troup

Continued from Page 18

and interest in the work to either the graduate nurse or the student nurse. This broad field includes deformities and disabilities of the trunk as well as the arms and legs. These may roughly be divided into two classes: those acquired by disease or accident, and those of congenital origin. Under those acquired by disease of accident, at the head of the list stands:

1. "Tuberculosis of the bones and joints," attacking most frequently the lower extremities and the spine.

2. "Rickets" is said to be, perhaps, the next most frequent cause of physical deformity in young children, due to faulty nutrition, lack of sunlight and fresh air.

3. "Anterior poliomyelitis" is the next in order said to be responsible for many of the underprivileged children encountered to-day.

The epidemic in the United States in 1916 in this connection will be recalled and the estimate that the one hundred and fifty thousand children who recovered from the infection itself were left more or less crippled.

To these may be added osteomyelitis, scoliosis, chronic arthritis, the obstetrical and spastic paralysis, and other disabilities of the joints.

Under the congenital deformities may be listed the following:

Congenital club feet, congenital dislocation of the hip, torticollis (or wry neck), spina bifida occulta, and other congenital deformities of the spine and extremities.

Field for Service Extensive

The orthopedic surgeon should also have the opportunity of treating recent and old fractures and their complications.

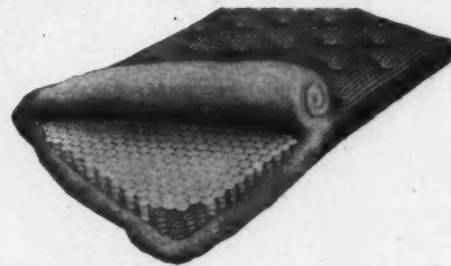
This list, as I have heard the cases discussed, might be considerably added to, but possibly enough has been suggested in the way of causes to indicate the varied elements and the broad avenue for instruction open to the nurses in our hospitals, and my opinion is, as I have watched the work of the hospitals, that with the possible exception of spastic paralysis, there is not one of the causes of deformity or disability herein enumerated which, if detected early enough, cannot be largely alleviated or wholly prevented.

To date over 3,000 children have been treated in the wards of our hospitals and more than twice that number in the outpatient departments, and the waiting list stands at over 17,000.

It will be noted that a membership of 600,000 is supporting this cause. This organized force has asked for the collaboration of nurses and physicians to help in the wonderful work.

The work may be termed a "common cause" in the Shrine organization. This vast organization is thinking and acting in unison upon the subject. Success in the Montreal Hospital or in the San Francisco Hospital will be instantly recorded and practically regarded as a success throughout the entire chain.

Comfort and Economy



are combined in the

MARSHALL Spring Mattress

Comfort for the patient, which in the opinion of the world's foremost physicians, often means more to the average convalescing patient than medicine.

Economy for the hospital—because Marshall Spring Mattresses wear for years and years even when subjected to hard usage in hospitals. They are an economy in the long run.

Ask your local furniture dealer to get you our special prices on hospital outfitting, or write us if you wish.



The Marshall Ventilated Mattress Co.
LIMITED

100 Lombard St.

Toronto 2, Ont.

Inventors, perfectors and 28 years manufacturers of the finest inner spring mattress

Please refer to THE CANADIAN HOSPITAL when writing



DIAMOND JUBILEE OF CONFEDERATION ENTRANCE

Canadian National Exhibition

Toronto, Aug. 27 to Sept. 10

FROM sea to sea a jubilant birthday party is in progress—a national carnival is being staged. With joy and thanksgiving Canadians are recalling the birth of a United Canada. This celebration is of wider interest than to Canadians alone. The whole world has wished her well and Canada in turn issues an invitation to the citizens of all nations to visit her domain and take part in the carnival. Outstanding leadership in this event is being given by the Canadian National Exhibition at Toronto. Spend your vacation visiting this great spectacle and enjoy a holiday which will linger forever in your memory.

Nearly 100 permanent brick and concrete buildings of unusual and striking architecture and 10 temporary structures are set down in a fairyland of winding paved driveways midst parklike surroundings fronting the shores of beautiful Lake Ontario. Always new, always thrilling, always instructive—this ever-expanding spectacle portrays every phase of a vigorous and fast-growing nation.

Summarized, the Canadian National Exhibition is a meeting place for provinces, states and nations—it has immeasurable educational value—affords an opportunity for a graphic survey of our national resources—imparts new ideas. It is a great

mart for buyer and seller, shows the whole range of Canada's production and market requirements, and provides a forum for the mutual exchange of ideas, theories and experiences.

The art centres of all the nations are drawn upon for the finest in paintings, etchings and sculpture. The exhibits of fruit, field crops and live stock set a standard for the world. The great railways and manufacturers vie with one another in friendly rivalry to produce exhibits or actual working displays well worth a journey across the continent to see; and the sources of entertainment are almost endless. Come and see the Historical Pageant, depicting stirring events of Canada's early days—a grand night spectacle of brilliant colour and costume. Hear the famed Exhibition Chorus of 2,000 voices under the baton of Dr. H. A. Fricker, M.A., F.R.C.O., conductor Mendelssohn Choir; and famous bands from the musical centres of Canada render choicest open air programmes daily.

And do not overlook the opportunity of inspecting Toronto's fine hospitals—its world-famed University—the Museum, Art Galleries and other attractions of educational value to hospital executives. Toronto's fine hotel accommodation and thousands of private homes will make you welcome. Decide now to visit the "Ex."—Aug. 27 to Sept. 10



THE LIVING ROOM

of the New Nurses' Residence at

THE HOSPITAL FOR INCURABLES

TORONTO, ONTARIO

Furniture, Draperies and Rugs for the entire building were supplied by The T. Eaton Co., Limited.

A highly skilled staff of furnishing experts is at your service. The furnishing of hospitals, hotels, theatres, clubs and institutions a specialty.

Address correspondence to SPECIAL CONTRACT DEPT. at your nearest Eaton Store

TORONTO

WINNIPEG

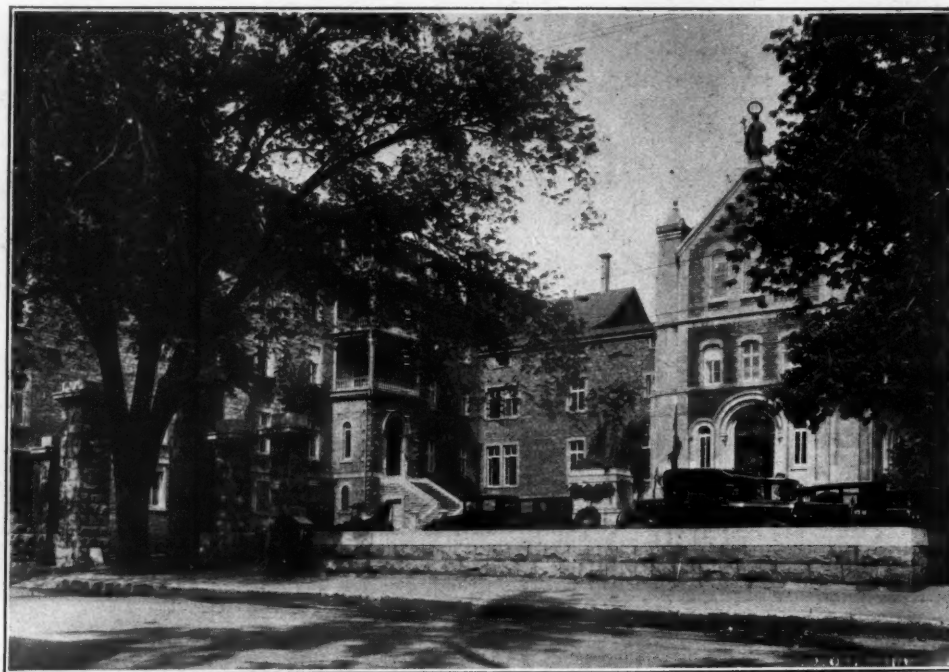
MONTREAL

HAMILTON

THE T. EATON CO. LIMITED
CANADA

Please refer to THE CANADIAN HOSPITAL when writing

Canada's Leading Hospitals



HOTEL DIEU, ST. JOSEPH, MONTREAL

THE stately and imposing entrance to Hotel Dieu, St. Joseph, Montreal.

Built of stone with slate roofs, Hotel Dieu gives an impression of solidity and security. The "Sister of Mercy" Mem-

orial in the centre of the parking court is well done and adds much to the architectural effect. Hotel Dieu is a public hospital of about 270 beds, and is situated on Pine Avenue West.



Toronto Hospital for Consumptives

Continued from Page 14

cases. But the balance is made up by the donations of sympathetic friends and by organized financial drives.

All the buildings are heated from a central heating plant, and in the laundry sterilization by steam is so efficient that employees and nurses work among the sick with the utmost safety. In fact the standard of health among the nurses at this hospital is particularly high, compared with hospitals where general diseases are treated.

Tuberculosis is a deadly enemy of the human race, but here it is faced and fought bravely and unflinchingly every step of the way, and although there are cases too far advanced to be cured, yet the number of those who regain health and are restored to useful occupation in the world gives ample reward for the kindly thought, care and effort expended by those in charge, and this, like all great works of mercy, "brings its own reward."

NEW WESTMINSTER, B.C.—For many years among the services provided at the Provincial Exhibition has been a fully equipped emergency hospital, ready during exhibition week to take care of any sort of emergency case that may arise. This service is maintained each year by the medical and nursing staff of the Royal Columbian hospital, which supplies the entire equipment for the receiving room and emergency wards.

EDDY'S Toilet Tissues and Serviettes

The convenience and quality of these Eddy products recommend them to those who seek strictly sanitary tissues and paper serviettes at low cost.

The name "Eddy" is a value guarantee worth looking for when buying these articles.

THE E. B.
EDDY
CO., LIMITED
Hull, Canada

Does anyone question the necessity of clean floors in a modern Hospital?

Breathes there a hospital executive whose business sense does not tell him that clean floors are vital to a hospital's cleanliness—and success?

Fran'ly, we don't think such a one exists.

But how many of us, though we realize the necessity, have actually taken steps to provide for clean floors as scientifically as we perform other antiseptic measures?

The truth is that hand scrubbing and mopping are not adequate for hospital cleanliness. A few square feet of floor scrubbed by a FINNELL Electric Floor

Machine will reveal how much cleaner your floors **could** be. Into corridors, laboratories, kitchens, operating rooms, lavatories, ward rooms, the FINNELL brings new sanitation, efficiency. It waxes and polishes wood and linoleum where required. Its motor is **practically noiseless**. Time, labor, money saved. Write to-day for the free booklet explaining efficient, inexpensive floor maintenance.

**DUSTBANE PRODUCTS
LIMITED**

Standard Bank Bldg.
OTTAWA, ONT.

Branches: Montreal,
Winnipeg, Vancouver



FINNELL

ELECTRIC FLOOR MACHINE

It waxes • It polishes • It scrubs

**Eight Models—a right size for
every hospital, large or small**

Please refer to THE CANADIAN HOSPITAL when writing

Quality Hospital Apparel

**Made Up to a Standard—
Not Down to a Price**

Get our better-quality hospital apparel. Costs no more, and very often not as much as just ordinary garments. This is due to our large production in bright sunlit work-rooms equipped with every modern labor-saving device. Compare a Corbett-Cowley garment with any other make and you will be convinced of the exceptional values offered in our hospital apparel.

There is no doubt that with the STEADY ADVANCE IN THE PRICE OF RAW COTTON we will be forced to advance our prices before long. You would do well therefore to anticipate your requirements in cotton goods and place your orders early.

Note these prices based on cotton purchased when prices were at their lowest. As long as our stock lasts, we will fill orders at these prices, but prices are subject to change without notice; therefore get your orders in early before the advance takes place



ALL OUR GARMENTS
UNCONDITIONALLY
GUARANTEED AS TO
MATERIAL AND
WORKMANSHIP.

Made in Canada by

CORBETT-COWLEY
Limited

468 King St. W.
TORONTO

314 Notre Dame St. W.
MONTREAL

A post card will
bring samples of
material for Hospital
Garments and Nurses'
Uniforms, also cata-
logue of

C NURSES' C
UNIFORMS

Please refer to THE CANADIAN HOSPITAL when writing

Quality Hospital Apparel at Prices No Higher than the Ordinary Kind



Style No. 3200
**NURSE'S
OPERATING GOWN**
Reg. Cuffs, \$19.00 per doz.
Knitted Cuffs, \$21.00 per doz.



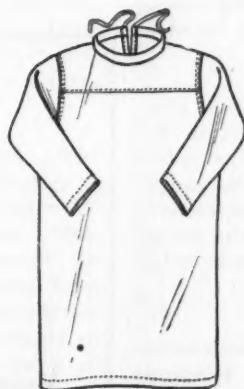
Style No. 9003
BIB APRON
Best Sheeting
\$1.50 each or 6 for \$8.50



Style No. 9001
WAIST APRON
Best Sheeting
\$1.00 each or 6 for \$5.50



Style No. 3700
**SURGEON'S
OPERATING GOWN**
Reg. Cuffs, \$19.00 per doz.
Knitted Cuffs, \$21.00 per doz.



Style No. 407
PATIENT'S BED GOWN
Standard length 40 in., opens down back, with linen buttons or tie tapes if preferred, reinforced with yoke both back and front.

Prices:
Indian Head, unbleached..... \$9.00 per doz.
Indian Head, bleached..... \$13.00 per doz.

SALES TAX INCLUDED

MADE IN CANADA BY

CORBETT-COWLEY
Limited

468 King St. W.
TORONTO

314 Notre Dame St. W.
MONTREAL



Style No. 700
ORDERLY'S COAT
Made of good quality bleached duck, plain white or striped, medium high collar, three pockets, five detachable buttons, neat pointed cuff on sleeve.
Prices:
Plain white..... \$20.00 doz.
Striped..... \$21.00 doz.



Style No. 300
**HOUSE
DOCTOR'S COAT**
Made of bleached drill, this coat is neat and serviceable. It has the lay-down collar, three pockets, detachable buttons and pointed cuff on sleeve.
Prices:
Coat..... \$25.50 doz.
Pants to match..... \$34.00 doz.

Please refer to THE CANADIAN HOSPITAL when writing

News of Hospitals and Staffs

A Condensed Monthly Summary of Hospital Activities, Building and Extension Plans and Personal News of Hospital Workers.

Editor's Note: Contributions of items for publication in this department will be gladly received. Please address, The Canadian Hospital, 454 King Street West, Toronto.

LLOYDMINSTER, SASK.—A hospital to cost \$125,000 is to be erected at Lloydminster, Sask., the town being the builders and the owners. Storey Van Egmond, Regina, Sask., is the architect.

* * *

CHATHAM, ONT.—The footings for the foundation of the new nurses' home to be erected in connection with the Public General Hospital have been completed. Construction work has been commenced.

* * *

MONTREAL, QUE.—Building permits issued at the City Hall on July 5 included one to the Petite Soeurs Franciscaines, 1065 Maisonneuve Street, for a hospital having the dimensions of 150 by 42 feet, five storeys in height, and costing \$175,000.

* * *

LETHBRIDGE, ALTA.—A \$30,000 addition is being built to the hospital at Lethbridge. The Galt Hospital Board are the owners. There will later be built to the institution a wing for maternity cases. The new addition will be of brick on concrete foundation.

* * *

TISDALE, SASK.—The contract for the new twenty-five-bed hospital has been awarded to A. Desrochais, of Edmonton, at \$47,000. The main building is to be 85 feet by 35 feet and the annex 30 feet by 30 feet. The site is a particularly attractive one on the Dog Hide River, northeast of the town. The excavation is completed. Construction is to be fireproof throughout.

* * *

TORONTO, ONT.—In connection with the scheme for the extension of the Toronto General Hospital buildings, the trustees at a specially convened meeting on July 5 passed several by-laws providing for the expropriation of lands and the projection of streets south of the present hospital building.

It was decided to expropriate lands lying to the south of Christopher Street and between Elizabeth Street and University Avenue, while the projection of Gerrard Street westerly from Elizabeth to University Avenue was approved. The land required to extend Gerrard Street was ordered conveyed to the City of Toronto in return for Christopher Street and the northerly portions of Centre Avenue and Chestnut Street.

The trustees propose to erect a new pathological building and an extension to the Private Patients' Wing on the site thus appropriated.

CORNWALL, ONT.—Atchison & Co. have the general contract for a \$35,000 addition to the Cornwall General Hospital. The architect is Cecil Burgess, Ottawa.

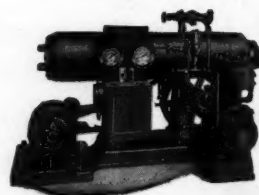
* * *

MONTREAL, QUE.—The new Women's General Hospital, on Dorchester Street, will be completed early in August. The building will have accommodation for 223 patients in private, semi-private and public wards, as well as providing for a complete out-patient service.

* * *

WINNIPEG, MAN.—Misericordia Hospital opened its new wing on June 24. In this addition there is accommodation for seventy-five patients. The building, four storeys high, is of steel and brick construction, and is equipped with steel furniture throughout. Each ward has a sun porch. The cost was about \$350,000.

* * *



Most Canadian Hospitals using
Mechanical Refrigeration
Have

"YORK"
ICE MACHINES

"The Best Made"

Let us send you the names of those nearest you.

Canadian Ice Machine Co., Ltd.

TORONTO

Montreal

Winnipeg

Vancouver

Please refer to THE CANADIAN HOSPITAL when writing

GRAVELBOURG, SASK.—Messrs. Storey and Van Egmond, architects, Regina, have received instructions to prepare plans and specifications for a hospital at Gravelbourg, for the Grey Nuns, and tenders will be called for shortly. It is estimated that the hospital will cost approximately \$75,000.

KITCHENER, ONT.—Dr. J. J. Walters, Superintendent of the Kitchener-Waterloo Hospital for the past five years, will complete his term of efficient service for that institution on August 1, his resignation, which he tendered to the hospital commission, being accepted with much regret. Poor health and the need for a change of surroundings after five years of institutional work are the reasons which prompted Dr. Walters to tender his resignation at this time.

WINDSOR, ONT.—As a contribution toward the welfare of the Essex County Tuberculosis Sanatorium, the Junior Hospital League has been busy recently installing sand boxes, swings, teeters and other playground apparatus at the Sanatorium.

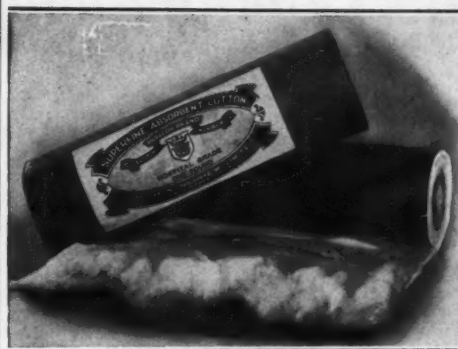
The League has also engaged Miss Edith Wynne Pryce, Physical Director of the Y.W.C.A., who will teach the convalescent children at the institution folk and other dances during the summer months.

WALKERVILLE, ONT.—Splendid progress is being made on the new Metropolitan Hospital, south of Tecumseh Road. The brick work on the main building, isolation hospital and power house has been completed, and interior trimming is under way. Plastering has been practically completed, and most of the terrazzo work is done in the isolation hospital. Boilers are being put into place in the power house, and equipment has already begun to arrive for the main building.

MONTREAL, QUE.—Miss Elizabeth Smellie, Chief Superintendent of the Victorian Order of Nurses in Canada, sailed from Montreal on the Montcalm for Europe to spend a couple of months abroad. Miss Smellie will attend the interim conference of the International Congress of Nurses at Geneva from July 27 to 30, at which she will deliver an address dealing with the advantages and disadvantages of standardizing nursing technique from the point of view of the public health nurse.

GLACE BAY, N.S.—A very attractive booklet has been published celebrating the Silver Jubilee of St. Joseph's Hospital. It contains a foreword from the Right Reverend the Bishop of Antigonish, and portraits of the Bishop and the founder, the Rev. Ronald Macdonald. The booklet is plentifully illustrated with cuts of the hospital, the nurses' home, the various rooms, and with pictures of the first Board of Trustees and the present management.

Founded in 1902, the Hospital was standardised in 1921. To-day it is an institution of no mean proportions and does a great ministry in the mining area and the country surrounding. The booklet contains many tributes from medical men throughout the Province.



Highest Standard

**Surgical Dressings
Gauze Cotton
Bellevue Rolls**

Superior Quality

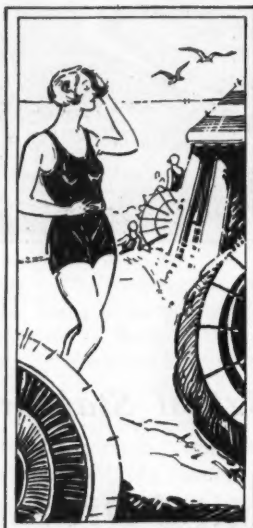
CANADIAN MADE

SMITH & NEPHEW
LIMITED
MONTREAL

Please refer to THE CANADIAN HOSPITAL when writing

Be Comfortable

as well as presentable



IT isn't comfortable to be conscious of stiffly starched coats, aprons, uniforms, etc., no matter how immaculate they may appear. And hospital attachés should have peace of mind from rustling, movement-impeding starchiness in their apparel by all means. Satin Finish imparts just the right stiffness for good appearance plus flexibleness that won't wrinkle or rustle and without any visible surface evidence of starchiness. It's that invisible stiffness, hidden strength and beautiful satinlike finish that has made Satin Finish the leader it is to-day.

USE IT
RAW



OVER THE
WHEEL

THE KEEVER STARCH CO.
COLUMBUS, OHIO, U.S.A.

THE LAUNDRY

Properties of Individual Sours

By F. H. GUERNSEY
Chief Chemist, The Cowles Detergent Co.

Part II

Muriatic Acid

(HYDROCHLORIC ACID)

This* is another strong mineral acid having much the same general effect as sulphuric acid in textile souring. It is a better iron solvent, has no reducing action and is more volatile. It is very destructive, however, and a great rust-developer.

Aluminum chloride, often used as a deodorizer, yields hydrochloric acid upon being dissolved in water and hydrolyzing, and is very destructive to fabrics. Clothing worn by women thus frequently develops holes in tendered areas due to this reaction of the deodorizing materials used.

Hydrochloric acid is not as satisfactory as the above sours for blue fixation.

Hydrofluoric Acid Sours

Under this heading we have (a) hydrofluoric acid itself; (b) the acid salt, or sodium acid fluoride; (c) the neutral sodium silico-fluoride.

Hydrofluoric acid will attack glass, and is therefore usually supplied in wood, wax or hard rubber containers. The acid itself is too difficult to handle under average conditions of textile souring, and, as a result, the acid salt, sodium acid fluoride, is the most popular of the series.

The sodium silico-fluoride is a neutral salt, but has the property of absorbing alkali. In one sense this is similar to a neutral fat-absorbing alkali. Only in this way, however, does the sodium silico-fluoride function as a sour. It is not acid in reaction itself.

The acid and acid fluoride will neutralize alkali, forming the neutral and inactive sodium fluoride as a by-product. They will also decompose lime soap, forming insoluble fluorides and free fatty acids. Their acidity will take care of bleach decomposition and satisfactory results are produced in bluing.

These sours (the acid and acid fluoride) are characterized by their safety toward fabrics and colours, and excellence in iron stain removal. In this latter effect they are perhaps not quite the equal of oxalic acid but they meet the demands of practical application. The sodium silico-fluoride will not dissolve iron stains and this point should be clear in one's mind. Sodium silico-fluoride is also soluble with considerable difficulty while the acid and acid salt are very soluble in water. The two latter sours are the only sours available which will dissolve iron stains and yet be harmless to the fabric even though left in the goods.

None of these sours have any reducing bleach action, but they are inodorous and since they are

Please refer to THE CANADIAN HOSPITAL when writing

MAGIC BAKING POWDER

Ideal for the Diet Kitchens
of Modern Hospitals

Magic Baking Powder is composed of Phosphate, Bicarbonate of Soda and Starch. No alum. Each ingredient is rigidly tested. Magic Baking Powder is uniform in quality and can be absolutely depended upon for uniformly good results in baking.

E. W. GILLET CO. LTD.

TORONTO

WINNIPEG

MONTREAL



harmless to fabrics and colour they may be allowed to remain in the goods to correct the difficulties attending the use of alkaline water for rinsing. The heat of ironing will evaporate most of the acid portion of the compound and no harmful effects will result.

Sodium Bisulphite

This is a solid acid salt of sulphurous acid (not sulphuric acid). It is weakly acid and will absorb alkali to form the normal sulphite.

Sodium bisulphite, however, is an unstable compound and often suffers decomposition under the conditions of textile souring. The separation of free sulphur, which often occurs, is detrimental and stain-forming. Occasional formation of sulphides will result in development of dark stains from iron, etc.

Sodium bisulphite has practically no action on lime soap, but exerts a reducing bleach action. In this manner it often proves a good stain remover but it frequently happens that upon exposure to air the stain will re-develop due to atmospheric oxidization. Sodium bisulphite is frequently used to bleach wool and silk (where the use of chlorine bleach is prohibitive) but the results are not as permanent as those obtained in the peroxide bleach.

Sodium bisulphite is detrimental to most blues, the tendency being to discharge or bleach out the colour of the bath. It is also more or less destructive to dyed colours, but has no destructive action upon the fibre. Heat will volatilize the acid principle without damage to the goods.

The principal value of sodium bisulphite appears to be as a destroyer of chlorine bleach. Its opposite (reducing) action makes it efficient for this purpose.

It is not a solvent for iron stains, though it may, by reduction, lessen the depth of shade of fresh stains.

Lactic Acid

This is another organic acid, appearing on the market as a syrupy liquid. It is a good neutralizer of alkali and lime soap. All the by-products of such chemical action are soluble in water. It is quite strongly acid, falling say, between oxalic acid and acetic acid. It has some reducing action and is an excellent stain remover and bleach neutralizer. It has fair solvent action upon iron stains and approaches oxalic acid in blue fixation. When concentrated in the goods it has moderate destructive action upon fibres and colours. However, as it is extremely soluble the rinsing problem is a simple one, and the danger of carrying over lactic acid is very remote. It is not vapourized readily at ironing temperature, but if present in reasonable quantity, inflammable vapours will be driven off. Lactic acid is one of the best acids obtainable for textile souring.

Boric Acid

This is a very mild acid, rather difficultly soluble, but possessing some virtues as a sour. This is chiefly as a medium by which the goods may be safely left in an acid condition and through its antiseptic properties, goods so treated will resist

Continued on Page 35

Please refer to THE CANADIAN HOSPITAL when writing

Classified Department

CLASSIFIED RATES

Four cents a word each insertion. A discount of 10 per cent. allowed on orders for six or more insertions when payment is made in advance.

BUYERS' DIRECTORY RATES

\$4.50 per month on 12 months' order.

\$5.50 per month on 6 months' order.

Positions Open

(a) Children's Ward Supervisor; small department in 125-bed general hospital, California; \$100 and full maintenance. (b) Operating Room Supervisor wanted in 100-bed Illinois hospital; \$100 and maintenance to start. No. 1442 Aznoe's Central Registry for Nurses, 30 North Michigan, Chicago.

(a) Graduate nurse for night duty; Southern Michigan 25-bed hospital; \$90 and maintenance. (b) Head nurse, R.N., wanted for 700-bed mental institution, East; salary starts at \$85 and maintenance, increase for length of service. No. 1443 Aznoe's Central Registry for Nurses, 30 North Michigan, Chicago.

(a) Chicago general duty, 150-bed hospital; \$85 and maintenance. (b) New York 130-bed hospital desires two general duty nurses; \$80 for days, \$90 for nights, with maintenance; must be eligible for New York registration. (c) Night supervisor, middle-aged, wanted for 50-bed hospital, northern state; \$85 and maintenance. No. 1444 Aznoe's Central Registry for Nurses, 30 North Michigan, Chicago.

(a) INSTRUCTRESS who also assists the superintendent of nurses wanted for 80-bed eastern hospital; ideal situation; \$110 and maintenance. (b) Competent instructress in theory and practice wanted for 50-bed general hospital, southeast; not too young. No. 1445 Aznoe's Central Registry for Nurses, 30 North Michigan, Chicago.

WANTED—Accredited graduate nurses, dietitians and technicians; positions available in every section of the country; each applicant given individual attention; send for registration form. Medical Bureau, Marshall Field Annex, Chicago.

WANTED—Situations for accredited graduate nurses, technicians and dietitians; candidates available for every kind of position—from general duty nurse to hospital executive; references investigated always; services gratis to employers. Medical Bureau, Marshall Field Annex, Chicago.

Situations Wanted

CANADIAN DIETITIAN—(a) Age 23, over a year's experience as assistant, desires similar opening, Canada preferred. Reasonable salary. (b) B.S. Columbia, age 28, about six years' experience as Hospital Dietitian and Instructor of Nutrition and Dietetics, available for appointment. Will start at \$100 and maintenance. No. 1521, Aznoe's Central Registry for Nurses, 30 North Michigan, Chicago.

Jewett Training School for Nurses

BUSHWICK HOSPITAL, BROOKLYN, N.Y.

Registered with New York State. Thirty-month course to young women having one year high school or equivalent. \$15-\$25 allowance made after preliminary period. Write for catalogue.

Diplomas

DIPLOMAS—ONE OR A THOUSAND—Illustrated circular B mailed on request. Ames & Rollinson, 206 Broadway, New York, N.Y.

Schools of Instruction

WOMAN'S HOSPITAL IN THE STATE OF NEW YORK, West 110th St., New York City (155 gynecological beds, 50 obstetrical beds).

Affiliations offered to accredited training schools for three months' courses in obstetrics.

POST-GRADUATE COURSES

Six months in gynecology, obstetrics, operating room technic, clinics and ward management. Three months in obstetrics. Three months in operating room technic and management, Theoretical instruction by attending staff and resident instructor. Post-graduate students receive allowance of \$15 monthly and full maintenance.

Nurse-helpers employed on all wards. For further particulars address, Directress of Nurses, Woman's Hospital.

Please refer to THE CANADIAN HOSPITAL when writing

Your Hospital is Not Efficient Without Good Mattresses

CHEAP, poorly constructed mattresses retard the recovery of patients and create dissatisfaction and complaints.

"CANFEALINE" Perfect Spring Mattresses

are restful and soothe the fretful patient, besides effecting a big saving in the long run, due to longer wear.

Write and let us tell you about the superior construction and other advantages of the Canfealine.



Especially adapted to hospital use—our

Double Arc Pillows

"Keep their shape and last longer"—and are lower in price.

If your dealer does not handle, write us

The Canadian Feather & Mattress Co. LIMITED

Toronto

Ottawa

We Keep Awake that Others may Sleep

Properties of Individual Sours

Continued from Page 33

bacterial action and mildew formation. It is too weak an acid to effectively carry out the other functions of souring, but may be mixed with acetic acid or lactic acid to advantage.

Proprietary Sours

There are many proprietary sours on the market consisting of mixtures of various acids or acid salts. Unless one is sure about the behaviour of these latter materials, some extra caution should be exercised, because many of these compounds contain sulphuric acid or oxalic acid and they must be used accordingly. Some of these contain salt or other material for purposes of blue fixing.

Attempts have been made to temper the action of the strong acids by the use of so-called buffer salts of the same family as the acid. For instance, sodium sulphate is used with sulphuric acid, sodium chloride with muriatic acid, sodium oxalate with oxalic acid, etc. Many organic materials such as gelatin and gums have also been employed to reduce the hydrogen ion content of the solutions of the strong acids. The general results obtained, however, have never been satisfactory or produced a genuine protection for the fibre without seriously lowering the efficiency of the acid in its intended functions.

A somewhat similar case is seen in connection with the use of sodium bicarbonate to buffer down the burning effect of the caustic liberated from soda ash. The products thus formed (modified sodas) are not right because the buffer (bicarbonate) is unstable and is quickly converted into soda ash itself. As long as the bicarbonate remains unchanged and acts as a buffer, the activity of the soda ash is so reduced that large quantities of the material must be used to produce a cleaning condition and this naturally leads to a rinsing problem.

As in the case of uncontrolled caustic soda, the strong acids are absorbed in the fibre and strongly resist rinsing. The result is a condition known as "acid patches" which appear as tender spots in the fabric.

Every laundry manager should understand the behaviour of the sour he is using, and to do this it is necessary that he have dependable information on its composition.

Keeping Down Refrigerating Plant Costs

Continued from Page 17

must be remembered that every kilowatt hour consumed will cost the management anywhere from one to two and a half cents, and it is easy to see that unless the highest possible efficiency is maintained, the current consumption will be out of all proportion to the work performed. This, in turn, will be reflected in abnormally high power costs.

All hospitals that are operating a refrigerating plant or drinking water plant in connection with the institution, should make a careful survey of it, and see whether or not there is anything that might be done to improve the efficiency of the plant.

The Diet for Tuberculosis Patients

An abundance of good, wholesome and varied foods is an essential requirement in the treatment of uncomplicated pulmonary tuberculosis, but because gastric disturbances are such a marked feature of the disease, much harm is often done by overfeeding the patient before the digestive system is properly prepared for it, observes Sister Rose Genevieve in the August *Hygeia*.

Great care should be taken in cooking the foods selected, as proper cooking is the basis of all dietetic science. Even the valuable nutrient foods are of no use to the patient if they are poorly prepared. Boiling vegetables in a great quantity of water for a long time wastes both fuel and important mineral salts. Steaming is always preferable to cooking in water. If one cooks vegetables in water one should use very little of it. Meat should be roasted rather than boiled or fried.

Vitamins are of especial importance in the diet of a tuberculous patient. Orange juice is more than merely a refreshing drink and should be given between meals as nourishment. Milk, cream, butter, eggs and meat are useful in obtaining a high caloric diet, but they should be used in moderation at first till the patient becomes accustomed to them. The patient should be urged to take a quart of milk a day, using the milk in cooking.

21,385 Nurses in Canada

There are 21,385 nurses and nurses-in-training in Canada. 223 of these are men. There are 8,706 physicians and surgeons, of whom 152 belong to the gentler sex.

FOODS and BEVERAGES

Serve Your Patients with

BEEKIST HONEY

The choicest selection of Ontario's Honey rigidly graded and inspected. It contains all the elements necessary to the building and nourishing of the human system.

Ontario Honey Producers Co-Operative
LIMITED

47 Wellington St. East - Toronto, 2, Ont.

LA PERLE

PURE FRENCH OLIVE OIL

Analysed and pronounced "a perfect specimen of Olive Oil."

Write, wire or phone at the expense of

W. G. PATRICK & CO., LTD.

51-53 Wellington St. W. - Toronto
HALIFAX MONTREAL WINNIPEG CALGARY VANCOUVER

Please refer to THE CANADIAN HOSPITAL when writing

Food Service Equipment



40 Years' Service to the
Bakery Trade

OVENS

For every purpose
COAL, WOOD or GAS

Catalogue on Request

**HUBBARD PORTABLE
OVEN COMPANY**

1100 Queen St. W. Toronto

JACK FROST

ICE MACHINE CO. LTD. TORONTO

**DOMESTIC, APARTMENT HOUSE &
COMMERCIAL REFRIGERATION** *for every purpose*

GEO. R. PROWSE RANGE CO. LIMITED

**High-Grade Kitchen Equipment
for Hospitals, etc.**

2025 UNIVERSITY ST.

MONTREAL

HOSPITAL AND INSTITUTIONAL Crockery, Silver and Glassware

Distributors for

JOHN MADDOCK & SONS, LTD., ENGLAND

We specialize in Institutional Equipment and
sell direct. May we send you quotations
on any of the above lines you may require?

**BRITISH & COLONIAL TRADING CO.
LIMITED**

284-6 Brock Avenue

TORONTO

McClary's

SPECIALIZE IN

KITCHEN EQUIPMENT

Insulated Food Conveyors, Permanent and Portable Steam
Tables built to your specifications by skilled mechanics to
conform to the high standard of excellence always associated
with the name of McClary.

Tell us your requirements and we will give
you estimates.

HISTORICAL SKETCHES

Winnipeg General Hospital

It was during one of the fever epidemics in 1871 that Governor Archibald called a meeting in Winnipeg to discuss matters and form a Board of Health. This was done, and on December 13th, 1872, the hospital was organized, its first home being a settler's house at the corner of McDermot and Albert Street. Those who attended this historic meeting and were most actively responsible for the establishment of the hospital were Robert Cunningham, editor of the "Manitoban," James Ross, another newspaperman, Hon. A. G. B. Bannatyne, veteran free trader and storekeeper, Hon. Alfred Boyd, first Minister of Public Works in the Manitoba Government, and Dr. J. H. O'Donnell, a member of the Legislative Council.

From that date onward the young institution struggled against its adversities and managed to live and grow in spite of them. It had many different homes in various parts of the city and along the banks of the Red River. But it was not until the spring of 1875 that the Winnipeg General Hospital was duly incorporated as a result of an appeal to the Provincial Government. At that time the hospital occupied a site on Main Street North, belonging to Hon. John Norquay.

It did not remain there long however, owing to limitations of space, but was moved a few months later to a larger site near its present location, between Bannatyne and McDermot, on to property donated by Andrew Bannatyne and Dr. Andrew McDermot. The building then erected contained accommodation for sixteen public ward patients and four private patients. It had also a small operating theatre. Prominent among the first medical men associated with the General are such well remembered names as Dr. J. H. O'Donnell, Dr. J. S. Lynch, Dr. Jackes, Dr. Codd and Dr. (afterwards Sir John) Schultz.

Especially interesting among these names is that of Sir John Schultz. Not only was he the first Manitoban to attain the high office of Lieutenant-Governor of the Province but he was also one of the heroes of the Riel rebellion. In 1869 Sir John, then Dr. Schultz, was captured by Louis Riel along with a number of other citizens and imprisoned in Fort Garry. However, on January 23rd, 1870, he escaped from the Fort and although his leg was broken, he lived to attain the double honour of being Lieutenant-Governor (1888) and the first Manitoban to receive a knighthood, being created K.C.M.G. on May 24th, 1895. His revered widow, Lady Schultz, is happily still alive and although not actively engaged in public work is still closely associated with several of our city's institutions, including the Children's Home.

Since then—1875—the growth of the hospital

Please refer to **THE CANADIAN HOSPITAL** when writing

has been little short of phenomenal, for in the fifty odd years of its existence it has developed into one of the finest and most completely equipped institutions to be found anywhere. Its growth has been steady and continual, keeping pace with the increase of population and the needs of the community. In 1888 a nurses' home and maternity department were added; in 1892 an isolation hospital; in 1897 a surgical wing and another large wing in 1904. In 1905 the administrative building was completely remodelled and in the same year a temporary building for typhoid patients was erected. During 1907 and 1908 several minor improvements were carried out, including the building of a summer pavilion for children. The extraordinary growth of the city around 1910 made still further expansion necessary and the expansion was continued during the war years when several important new features were added including a very valuable and up-to-date psychopathic ward, a free dental clinic and an out-patient department.

The organization in 1883 of the Women's Hospital Aid Society and of the Social Service Department in 1910 played important parts in the hospital's history and the educational work carried on in development of the hospital and the activities of these organizations still contribute much to its successful operation. Indeed there are many individuals and organizations deserving honourable mention for unstinting efforts and great financial generosity in behalf of the General Hospital and the story of its career is closely interwoven with the life story of many great men and many humble ones too whose names have been made illustrious by the history of Western Canada. Proof, however, that neither the efforts of the pioneers nor their gifts were made in vain is amply provided by the wide and beneficent usefulness and the general excellence of the hospital as it now exists.

Dr. George Stephens, as medical superintendent of the Winnipeg General Hospital, is the head of what is undoubtedly one of the greatest institutions of any kind in Western Canada. Its splendid charitable service, which provides free medical treatment and hospital accommodation for those who are unable to pay; the voluntary, unpaid attendance of the city's best physicians and surgeons in the public wards, which does away with the necessity for penalizing the occupants of the private wards; and the great educational work which is carried on in connection with the University of Manitoba—are among the most outstanding achievements of the General Hospital.

WELLAND, ONT.—Construction work on the new wing of the Welland County General Hospital is progressing rapidly. The brick walls enclosing the steel frame are up, and the roofing work is under way.

The elevator has been so designed as to make the roof accessible by it, and the hospital board now has under consideration a plan of placing an additional structure on the roof to be utilized as a sun-treatment room.

Work commenced March 22. The contract price is \$70,770, exclusive of heating and plumbing.

BUYER'S DIRECTORY

Diack Controls

—for—

STERILIZATION Accepted the
world over as a needed safety measure
SAMPLES FREE

A. W. DIACK

5533 Woodward Ave.

DETROIT, Mich.

WHITEX

The Sign of Quality

White X-Ray and Surgical Supply Co.

80 Richmond St. East, Toronto. Main 5285

Classroom Equipment

Dissectible Models,
Charts, Bone Studies, Dolls, Specimens and Slides
for
Anatomy, Physiology, Obstetrics, Gynecology,
Neurology, Embryology, Otology,
Laryngology, Etc.

Denoyer-Geppert Company

5235-57 Ravenswood Ave. - CHICAGO, ILLINOIS

SAVE PAINTING BILLS

This wonderful product is just the thing for your hospital; will clean painted walls, enamel, woodwork, metal ceilings, burlap and all decoration—will make them just like new with little labor.

A RENOVATOR A MONEY-SAVER

Write for Full Particulars

STANDARD CLEANING PRODUCTS LTD.
81 BOND STREET - TORONTO, ONTARIO



CARETAKERS' SUPPLIES

Ash Cans, Brooms,
Brushes, Cleaners,
Disinfectants, Dusters,
Floor Oils,
Wax, Liquid Soap,

Soclean

Mops and Wringers,
Pails, Paper
Cups and Towels,
Toilet Room Supplies, etc.

Write for Sample

SOCLEAN LIMITED

444 King St. W.

Toronto 2

Please refer to THE CANADIAN HOSPITAL when writing

BUYER'S DIRECTORY

Your Marking Problem Solved! Cash's Names & Woven Labels

Ensure clear, neat and
permanent identification.

SAMPLES AND PRICES ON REQUEST

J. & J. CASH, INC.

10 Grier Street - Belleville, Ont.



HOSPITAL RECORDS

We make and supply the new
standard systems and equipment
for Hospital Record Keeping.
Samples and complete informa-
tion on request.

System Service Department

OFFICE SPECIALTY MFG. CO.
97 Wellington St. W., TORONTO

The Burke Electric & X-Ray Co. X-RAY ENGINEERS

Complete X-Ray and Physio-Therapy
Installations, Maintenance Service

Special Equipment Made to Order

Kelley-Koett X-Ray Apparatus

490 Yonge Street,
Toronto

219 Medical Arts Bldg.,
Montreal

CANADIAN LABORATORY SUPPLIES LIMITED



Canada's Leading Laboratory
Supply House



Headquarters in Canada for Laboratory Apparatus
and Chemical Reagents

437-439 King Street West - Toronto 2, Ont.

BRONZE

Artistic Cast Bronze Benefactors
or Memorial Tablets in
Solid Bronze.

Ward Plates—Directory Boards and Main Entrance Signs
—Bronze Standard and Bracket Lamps, etc.

Hospitals We Have Supplied:

St. Thomas War Memorial Hospital, St. Thomas, Ont.; London
War Memorial Hospital for Children, London, Ont.; Alexandra
Sanatorium, London, Ont.; Prince Edward County Hospital,
Picton, Ont.; Muskoka Hospital Tablet to Sir Wm. Gage,
Tillsonburg Memorial Hospital, Tillsonburg Ont., etc.

Write Us for Prices and Suggestive Sketches

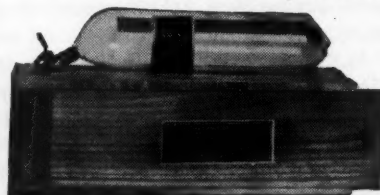
J. G. Tickell & Sons

560 KING ST. W. Art Bronze Founders (Ad. 4062) TORONTO, ONT.

The Advertisements

Ames & Rollinson	34
Aznoes	34
Bard-Parker Co., Inc.	7
Beaver Laundry Machinery Co., Ltd.	8
British & Colonial Trading Co., Ltd.	36
The Burke Electric & X-Ray Co.	Fourth Cover, 38
Canadian Feather & Mattress Co., Ltd.	34
Canadian Ice Machine Co., Limited	30
Canadian Laboratory Supplies, Limited	38
J. & J. Cash, Inc.	38
Castle, Wilmot Co.	10
Classified Advertisements	34
Corbett-Cowley, Limited	28-29
Davis & Geck, Inc.	First Cover, 19-22
Denoyer-Geppert Co.	37
Dustbane Products, Ltd.	27
A. W. Diack	37
T. Eaton Co., Ltd.	25
E. B. Eddy Co., Ltd.	27
M. B. Evans X-Ray Co.	4
Finnell System	27
E. W. Gillett Co., Ltd.	33
J. F. Hartz Co., Limited	17
The Hubbard Oven Co.	36
Jack Frost Ice Machine Co.	36
Keever Starch Co.	32
Kellogg Co. of Canada, Limited	3
Lewis Manufacturing Co., Ltd.	Second and Third Covers
MacDonald, J. A.	38
Marshall Ventilated Mattress Co., Ltd.	23
McClary Mfg. Co., Ltd.	36
Metal Craft Co., Limited	4
Office Specialty Manufacturing Co., Limited	8-38
Ontario Honey Producers' Co-operative, Ltd.	35
Otis-Fensom Elevator Co., Ltd.	9
W. G. Patrick & Co., Ltd.	35
Prowse Range Co.	36
Smith & Nephew, Limited	31
Geo. Sparrow & Co.	5
Standard Cleaning Products, Ltd.	37
Sterling Rubber Co., Limited	17
Toledo Technical Appliance Co.	Fourth Cover
J. G. Tickell & Sons	38
Victor X-Ray Corporation	6
White X-Ray & Surgical Supply Co.	37

ANTIDOLORIN



Put up in
60 Gm.
and
100 Gm.
Glass Tubes
Coarse or
Fine Spray

Write for
special prices
to Hospitals.

Ethyl chloride of guaranteed purity. The standard for
twenty-five years. Safe, economical and convenient.

J. A. MACDONALD, PHM.B.

101 College Street

Toronto

Please refer to THE CANADIAN HOSPITAL when writing



"We can't make dressings by hand as cheaply as they're made by machine!"

How one hospital learned the way to simpler, more economical dressings practice

THE superintendent of surgical dressings in a Texas hospital had an idea. One day she broached it to the superintendent.

She said: "Why don't we buy our dressings ready-made?"

He said: "Why do you think we should?"

She replied: "I've watched the nurses when they've had to make dressings. They don't like it and it bores them."

He said: "But ready-made dressings would cost us more."

She said: "I don't see how they could. Not when you consider that a manufacturing company makes ten thousand times more dressings a year by machine than we do by hand! And despite that, they sell some of them for the same price as bulk material."

In response to his question—"How do you know?" she said: "I've checked up."

* * *

At her request the superintendent also "checked up." He found that the Lewis Manufacturing Company had instigated the "ready-made dressings idea," feeling that the manufacturer should do more than

merely supply the hospital with bulk dressings material.

So he tried some of the ready-made dressings materials and ended by adopting them all. For he found that they not only saved him considerable money. They also eliminated tedious drudgery for the nurses, were much more convenient in all ways, and made possible a direct economical control of supplies.

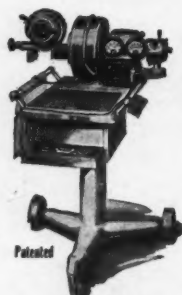
The nine products which Lewis now offers in finished or partially finished forms are: Ready-Cut Gauze, Dressing Rolls, Surgical Sponges, Sliced Bandage Rolls, Bandages, O. B. Pads, Kotex, Combination Rolls and Cellucotton Absorbent Wadding Ready-Cut.

To hospital executives we shall willingly send samples of any or all of these products. Or your Lewis salesman, reached at a branch office, will gladly show them to you and demonstrate their many advantages. Simply mail a post-card.

**LEWIS MANUFACTURING
COMPANY
OF CANADA, LTD.**

13 Victoria Square, Montreal, Quebec

Please refer to THE CANADIAN HOSPITAL when writing



Patented
The "MORSE" Wave Generator
TYPE A-25



*We invite you to call
at our Toronto Showrooms
while at the Canadian
National Exhibition*

THE LOW VOLT CURRENTS SINE WAVE - PULSATING DIRECT - GALVANIC *Are Indispensable to* PHYSIOTHERAPY

You will be interested to read our new illustrated booklet which briefly, yet in a clear and comprehensive manner, reviews the therapeutic effects of

THE LOW-VOLT CURRENTS

and describes how they are produced and delivered by
THE "MORSE" WAVE GENERATOR

This booklet fully explains the adjustment and control of this machine, which by its sheer simplicity enables the Doctor or his assistant to measure and apply these currents with accuracy and perfect ease.

A copy will be promptly forwarded upon request and without charge.

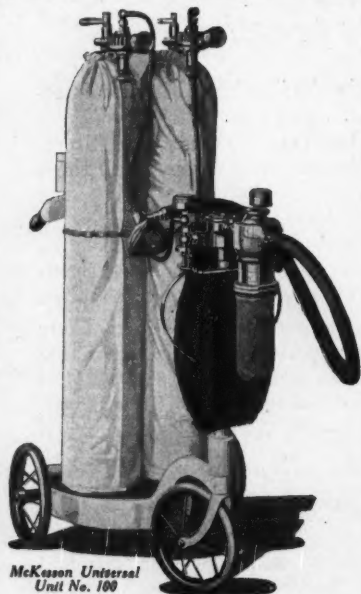
MAIL THE COUPON

Hospital
Doctor
Address
City Prov.

The Burke Electric & X-Ray Co.

490 Yonge Street
Toronto

219 Medical Arts Building
Montreal



McKesson Universal
Unit No. 100

The McKesson Gas-Oxygen Machine

is not limited to the amount of pressure it can deliver to the patient.

The McKesson machine not only regulates the pressure of mixed gases delivered to the patient, but in addition, it maintains that pressure and mixture, and furthermore stops the flow of gases when that pressure is secured, thus preventing any escape or waste of gas due to the accumulation of too much pressure.

The McKesson machine is most simply controlled, since one screw, namely the pressure screw, regulates the pressure at which the gases are delivered into the inhaler, and only safe pressures may be administered.

Other unique features are the emergency valve for artificial respiration, the automatic valves, which regulate the intermittent flow of the gases, and the re-breathing attachment which prevents the elimination of too much carbon dioxide from the blood.

Write us for more complete details

Toledo Technical Appliance Company

2226-36 ASHLAND AVENUE, TOLEDO, OHIO

Manufacturers of Gas-Oxygen Machines, the Metabolor and Surgical Pump

Please refer to THE CANADIAN HOSPITAL when writing

